

## REPORT OF THE CANADIAN NATIONAL COMMITTEE FOR THE INTERNATIONAL YEAR OF PLANET EARTH

www.EarthSciencesCanada.com

#### **International Year of Planet Earth**

A draft resolution for the proclamation of the International Year of Planet Earth (IYPE) was put forward by Tanzania at UNESCO's General Conference in October 2005 and was adopted by the United Nations General Assembly in December 2005. UN proclamation marked the start of IYPE on the international stage and its Statutes and Bylaws were approved and registered in 2006. A decision was made to expand the year into a 2007-2009 triennium and IYPE entered its implementation stage in early 2007. The governing board was composed of representatives of the initiators (IUGS and UNESCO), the leaders of the three main lines of IYPE operation (the Science Programme, the Outreach Programme and the Development Committee), 7 regional representatives of the National IYPE Committees, and representatives of each of the 11 Founding Partners, one member representing the International Partners, one the Associate Partners and one representing the major sponsors. The Board was chaired by Larry Woodfork. Canada was represented on the board by John Clague (INQUA) and Jim Teller, and we also benefitted from Peter Bobrowsky's role as Secretary General of IUGS.

The Norwegian Geological Society in Trondheim was selected to host the IYPE secretariat and Eduardo de Mulder was appointed IYPE Executive Director to manage the operations of IYPE. The tag line for IYPE was Earth Sciences for Society, highlighting the objective of using Earth sciences to help ensure a safer and more prosperous world. Ten science themes were selected and multilingual brochures on each of them were prepared.

Seventy-nine countries formed national committees to coordinate programs and activities. The Canadian National Committee was formed in the autumn of 2006 with the guidance and support of the Earth Sciences Sector, Natural Resources Canada (NRCan) through then Chief Scientist, Richard Grieve.

#### **Canadian National Committee**

The Canadian National Committee (CNC-IYPE) began to take shape in late 2006. John Boyd of the Calgary petroleum industry was appointed Chair in November of 2006 and a committee, representing industry, government and academia, with countrywide members, was put together and was ready to start meeting in early 2007. NRCan generously

provided half of Godfrey Nowlan's time in the Geological Survey of Canada's Calgary office to work on the committee and the services of retired scientist Blyth Robertson in Ottawa to be the Secretary. The members are shown in appendix A. The President of the Canadian Federation of Earth Sciences (CFES) was an ex officio committee member and the CNC-IYPE worked closely with CFES, which will look after the substantial legacy.

Roberta Bondar agreed to be Honorary Patron of International Year of Planet Earth in Canada and attended the official launch of IYPE in Paris in February of 2008.

Our first meeting was a videoconference and thereafter the committee met monthly by telephone conference organized by Blyth Robertson through the facilities of NRCan. John Boyd (Chair), Godfrey Nowlan (Program) and Jim Reimer (Fund Raising) were all Calgary residents and worked as an executive committee, facilitating the day-to-day operation of the committee, while policy or project decisions were made by the entire committee. James Burns, former treasurer of CFES, was the treasurer for the National Committee.

The National Committee decided early in its mandate to pursue Earth science outreach objectives that would have a lasting legacy to Canada. This goal has been achieved with several significant projects leaving a lasting and evolving legacy.

The Canadian National Committee submitted reports to the International Committee, when requested. As well as direct communication with Ed de Mulder, we had the benefit of contact with two of our committee members, Peter Bobrowsky, IUGS and Jim Teller who, along with Jack Hess of the Geological Society of America, represented North America at IYPE board meetings.

#### **Communications**

Skinnyfish Media Inc., a Calgary-based company, was recommended by the Canadian Society of Petroleum Geologists. Discussions took place in February, 2007 and Skinnyfish Media was selected to provide web site design and programming as well as brochure and brand design. The web site is located at <a href="www.EarthSciencesCanada.com">www.EarthSciencesCanada.com</a> and it has become the hub for all IYPE activities. From the ten science themes of IYPE we selected the five that best described the areas of interest to Canadian Earth scientists: Water, Hazards, Energy, Resources and Environment – "WHERE". Their importance to Canada is discussed on the web site under "The W.H.E.R.E. Theme" This theme has been an important element in providing continuity to our promotional material through the three years of IYPE and was expanded to "WHERE on Earth, WHERE in Canada".

The web site initially contained only a list of committee members, proposed projects and links to the international IYPE site, <a href="www.yearofplanetearth.org">www.yearofplanetearth.org</a>, but it expanded along with our activities. The design and look were developed concurrently. An overview of site usage in 2009 and 2010 is provided as Appendix D.

The first brochure was an eight-page document printed in English and French that included an explanation of the background and aims of IYPE, a list of potential projects to be supported, letters of support from the President of CFES and the Federal Minister for Natural Resources, and a listing of the Canadian National Committee. The subsequent brochure was a small folded card aimed at the general public rather than potential funders of projects. All publicity documents and promotional material and the web site are bilingual and the WHERE theme in French became "TERRE" — environnemenT, Eau, géoRisques, Ressources et Énergie.

Contributions from NRCan, non-allocated contributions and a small percentage of other donations were used to cover the costs of travel, accounting services, web site and brochure printing and preparation. Skinnyfish Media was extremely helpful in these early stages of the program. Total promotional, website and administrative costs were \$53,000 out of total funds raised of \$516,000.

In the summer of 2007 we learned that CBC Television had created a series on Canadian geology titled "Geologic Journey", narrated by David Suzuki, and that there was an opportunity to be an advertizing sponsor. Skinnyfish Media developed a suggested theme and budget of \$60,000 for the fee to CBC and for creating a 30 second advertizing video. EnCana generously agreed to cover the costs; the video was prepared and subsequently shown on all of the series broadcasts, with IYPE and Via Rail as the two principal sponsors. The video can be seen in the Brochures and Videos section of our web site.

Several articles were published in newsletters, magazines and journals on progress in the Canadian program for IYPE and several talks were presented at various conferences in Canada and the United States during the triennium (see Appendix C).

#### **Projects and Fund Raising**

In late 2006 and early 2007 a call for projects was distributed nationally through the Canadian Geoscience Education Network, Canadian University Departments of Earth Science, Natural Resources Canada and other groups to get ideas for projects. These proposals were distilled by the Committee into a "menu" of about twenty projects that were listed in the first brochure, produced in early 2007. One of the major tasks of the Canadian National Committee was to develop a fund to allow as many of the projects as possible to take place.

The first brochure was designed specifically to help raise funds and to publicize IYPE. Jim Reimer was in charge of fund raising and arranged presentations to prospective energy corporations and associations in Calgary. Robert Horn, a committee member retired from Inco, volunteered to make presentations to the mining sector.

Ultimately, \$405,870 was raised for various projects, plus \$65,000 donated by chapter sponsors (\$5000 each) for the book entitled Four Billion Years and Counting that was directed to the Canadian Geological Foundation. In addition, \$60,000 was paid to Skinnyfish Media and the CBC for the Geologic Journey advertizing video and

sponsorship. Major donations were made for Four Billion Years and Counting, the Earth Science Careers Web Site, the WHERE Challenge and the EarthSciencesCanada.com web site. Other donations funded smaller projects and many unallocated donations allowed the committee to support requests for smaller projects which were received throughout the triennium. A complete list of sponsors is in the Sponsors Section of our Website and in appendix B. A complete list of all projects and events which promoted IYPE is shown in appendix C. The list includes many events and projects that were not initiated by the IYPE National Committee but rather by local organizations in several provinces that served to recognize and publicize IYPE.

#### **Projects that Achieved Sponsorship**

#### (1) Four Billion Years and Counting Canada's Geological Heritage

The flagship project for IYPE was the proposal to produce a popular book on the geology of Canada entitled Four Billion Years and Counting: Canada's Geological Heritage. About 100 scientists contributed text for the book that was then transformed into a narrative by the editorial team led by Rob Fensome (Geological Survey of Canada). This project is nearing completion at the time of writing of this report. The principal supporter of this project, Nexen Inc., donated \$60,000. Other major support came from thirteen chapter sponsors (individuals and groups) that contributed \$5000 each for a total of \$65,000 that was placed in the Canadian Geological Foundation. Some of the funds contributed by NRCan were allocated to the book and NRCan also contributed an immeasurable amount through the work of several of its scientists on the editorial board. The Nexen Inc. donation is both for the book and for the future availability of the imagery and diagrams as an on-line resource for students, teachers and the citizens of Canada.

The book is an immense undertaking – up-to-date science in an accessible format with photographs, original diagrams and geological models in colour. Funds raised will help to defray production costs to make the book affordable to purchasers. The future availability of imagery on-line will require allocation of funds to upgrade the FBY portion of the web site. The book will be published in English and French through a partnership between the Canadian Federation of Earth Sciences and private publishers: Nimbus Press for the English edition and Éditions Multimonde for the French edition.

#### (2) The WHERE Challenge: a Web-Based Contest

The WHERE Challenge asked Canadians aged 10 to 14, individually, in groups or as entire classes, to answer two basic questions: What on Earth is in my stuff and Where on Earth does it come from? The objective was to select a household object and identify Earth resources that were required to make it. Objects selected ranged from a Boeing 747 to a tube of lipstick. It ran successfully in both 2009 and 2010, attracting several hundred entries from across Canada, involving thousands of individuals. The form of the entries was completely open and we received art, poems, essays and videos. More than forty judges from across Canada judged in seven regions against a rubric that rewarded style

and originality as well as scientific content. The rubric was substantially changed for the second year of the contest. In each year we awarded over \$16,000 in prizes and the winning entries can be viewed on our website under the WHERE Challenge. Major donors were EnCana at \$100,000 and Teck at \$50,000. The Challenge is continuing for a third year (2011) through a joint effort of the Prospectors and Developers Association Mining Matters and the Canadian Society of Petroleum Geologists.

#### (3) Careers in Earth Sciences Web Site

Donations of \$20,000 from both Talisman and Canadian Natural Resources Ltd. and \$10,000 from the Canadian Geological Foundation financed the creation of this beautifully designed section of the EarthSciencesCanada.com web site. Most of the content had already been developed by the Canadian Geoscience Education Network. The animated site contains information on the nature of Earth Sciences, the sort of jobs that it can provide, the academic requirements, post-secondary programs everywhere in Canada, interviews with working Earth scientists and indications of salary levels. The site is aimed at the junior high school level and it has been reviewed by students from across the country, indicating a high level of satisfaction and also ideas for improvement. The Canadian Federation of Earth Scientists has committed to the necessary annual updates for the website and there are ongoing discussions with university departments on expanding the information to include programs leading to professional registration. Video interviews with earth scientists are also a possible future addition.

#### (4) Geologic Journey

This five-part series on Canadian geology narrated by David Suzuki was part of The Nature of Things, a CBC television series. There was an opportunity for IYPE to be a sponsor and EnCana made this possible by a contribution \$60,000 for sponsorship and the creation of a spectacular thirty second video which was shown repeatedly through each episode. It is in the Brochures and Videos section of our website.

#### (5) Geovistas

A proposal for the development of brochures with description of geological features at specific sites or views in national parks was funded in 2009 by the Canadian Geological Foundation (\$10,000). This pilot project is under way in Jasper and Grasslands national parks. A graphical template has been prepared and material is currently being developed for eight sites in Jasper National Park and three sites in Grasslands National Park. Completion is expected in early 2011.

#### (5) Burgess Shale Centennial

A donation of \$10,000 from Devon Canada helped produce a guidebook for the International Conference held in Banff in 2009 to mark the centennial of the discovery of the Burgess Shale by Charles Walcott. The book entitled "A Burgess Shale Primer: History, Geology and Research Highlights", edited by Jean-Bernard Caron and David

Rudkin of the Royal Ontario Museum, was developed as a field trip companion volume. It includes six well-illustrated chapters dealing with the history of field research, the geology and stratigraphy of the area, the sedimentation history, fossil preservation, paleoecological considerations and the Mount Stephen trilobite beds. The book remains on sale in Banff.

#### (6) Youth Encouraging Sustainability (YES) Program

IYPE contributed funds to this youth forum event, held in Winnipeg in 2007and 2008 at the Manitoba Science Council. About 200 teachers and students came together to attend hands-on workshops on sustainability issues connected to forests, soil, water and the atmosphere. Mentorship teams assisted the teacher/student teams to formulate possible projects for the YES Showcase in the following year.

#### **Other Projects**

Popular Geoscience Fact Sheets

NrCan geoscientists based in Calgary prepared thirty-two fact sheets on Canada's mineral and energy resources. These sheets are down-loadable from <a href="https://www.gac.ca/populargeoscience">www.gac.ca/populargeoscience</a> and are badged as an IYPE project

Geo-Time Trail

Alan Morgan of the University of Waterloo designed a 4.5 km trail in Waterloo, Ontario scaled to reflect 4.5 billion years of geological time. Interpretive signs describing local geology and global events along the 4.5 km time line were installed. It was formally opened in 2008 as an IYPE project. A proposal was made to the Calgary Parks Foundation for a similar trail in Calgary but no funding is in place to develop it.

#### **National and International Events**

A National Launch was held in Ottawa at the National Museum of Science and Technology on Earth Day, April 22, 2008. Over 300 school children, grades 7 to 9 heard talks from Canada Space Agency director Steve MacLean, Environment Minister John Baird, NRCan geoscientists Alain Plouffe and Anne Therriault and John Clague, Simon Fraser University. John Boyd, John Clague and Blyth Robertson represented the National Committee and Blyth Robertson helped to organize the event.

Regional Launches were held in Winnipeg, Quebec, Dartmouth and Vancouver.

The International launch was held at UNESCO headquarters in Paris on 12-13 February 2008. Roberta Bondar, John Boyd, Jim Teller and Peter Bobrowsky represented Canada. Students from many countries participated in the launch. Unfortunately, lack of funding prevented Canada from sending students.

The final International Conference was held in Lisbon on 20-22 November, 2009. John Boyd, Jim Teller and Peter Bobrowsky represented Canada and two Canadian graduate students in geology attended and participated actively in the sessions. At the closing ceremonies, a large world map made of ceramic tiles filled part of the stage and the Canadian Committee, along with other countries, was recognized for its program and received a portion of the map. Our ceramic tiles are being framed for presentation to NRCan where they can be displayed as a memento of NRCan's contribution to IYPE.

There were periodic meetings of the International Board, with invitations to the National Committee chairs. Again, because of financial concerns, John Boyd did not attend any of these meetings. However, Peter Bobrowsky represented the IUGS at these meetings and was able to report back to our Committee.

John Boyd presented a poster on the Canadian Committee's program at the AGU conference in San Francisco in November of 2009.

#### **Legacy and Future Obligations**

The Canadian Federation of Earth Sciences will receive remaining funds from the National Committee when it is appropriate to release them. There are future obligations for the disposition of these funds

The book, Four Billion Years and Counting will be a long-term legacy of the Canadian IYPE program and the website imagery will be available to students, teachers and the general public. The website will require maintenance and design update.

The Careers website was updated in the summer of 2010 and it will require annual updates to repair links and to update information from post-secondary institutions. Within a few years, it will require a design update.

The WHERE Challenge will continue on in 2011 thanks to a joint effort of the Prospectors and Developers Association Mining Matters Program and the Canadian Society of Petroleum Geologists. The Canadian National Committee will offer advice based on experience to this group.

The website, www.EarthSciencesCanada.com will be turned over to CFES in hopes that it will become the core of the CFES website. The maintenance of this website will require a significant portion of the funds turned over to CFES.

#### **Financial**

The bank balance at the end of November 2010 was \$93,461. Of this amount, \$71,882 is committed to FBY. A complete financial report is attached at the end of this report.

#### Appendix A

#### **Canadian National Committee**

John Boyd, Boyd PetroSearch, Calgary, AB, Chair James Burns, Essential Energy, Calgary, AB, Treasurer Godfrey Nowlan, NRCan, Calgary, AB, Program Chair Jim Reimer, Result Energy, Calgary, AB, Fund Raising Chair Blyth Robertson, NRCan, Ottawa, ON, Secretary

Jennifer Bates, NRCan, Dartmouth, NS
John Clague, Simon Fraser University, Vancouver, BC
Jim Franklin, Franklin Geoscience, Ottawa, ON
Hélène Gaonach, Université du Québec à Montréal, QC
Fran Haidl, Saskatchewan Energy and Resources, Regina, SK
Robert Horn, Inco (Retired), Victoria, BC
Michel Jébrak, Université du Québec à Montréal, QC
Amanda McCallum, Geological Survey of Newfoundland and Labrador, St. John's, NL
Alan Morgan, University of Waterloo, Waterloo, ON
Ray Price, Queens University, Kingston, ON
Jim Teller, University of Manitoba, Winnipeg, MB

#### Ex Officio

Peter Bobrowsky, International Union of Geological Sciences, NRCan, Ottawa, ON Richard Grieve, NRCan Earth Science Sector, Chief Scientist, Ottawa, ON Bill Mercer, Canadian Federation of Earth Sciences, Toronto, ON Ian Young, Canadian Federation of Earth Sciences, Calgary, AB

#### Appendix B Donor List

More than \$100,000 EnCana Corp.

Natural Resources Canada - Earth Sciences Sector

**\$50,000 - \$100,000** Teck Resources Ltd.

Nexen Inc.

Canadian Geological Foundation

**\$10,000 - \$50,000** Canadian Natural Resources Ltd.

Talisman Energy Inc. Devon Energy Corp. ARC Financial Corp.

Canadian Society of Petroleum Geologists

\$5,000 - \$10,000 Canadian Society of Exploration Geophysicists

A.P.E.G.G.A. Divestco Inc.

Mineral Resources Education Program of British Columbia

Prospectors & Developers Association of Canada

Ministère des Ressources Naturelles et de la Faune, Québec

Under \$5,000 Result Energy Inc.

& In-Kind RPS Boyd PetroSearch

Corridor Resources Inc. SkinnyFish Media Inc.

McGill University - Earth & Planetary Sciences

Geoscape Grand River Project The City of Waterloo, Ontario Geological Association of Canada

Grasslands National Park, Saskatchewan

Jasper National Park, Alberta Alberta Geological Survey

List of individual chapter sponsors (\$5,000 each) for: "Four Billion Years and Counting".

John MaherJames ReimerRobert HornClayton RiddellMichael RoseDarcy MarudKen GillisStephan BenediktsonIan YoungStephen MarstonDr. Dale LeckieDr. John t'Hart

Roger Smith John Boyd

Tamaratt Professor of Geology, University of Calgary

Nova Scotia Mining Association

International Association of Hydrogeologists (Canadian Chapter) Institut National de la Recherché Scientifique Quebec Canadian Geoscience Education Network

#### Appendix C List of Activities and Products

#### OUTREACH PRODUCTS

- Poster entitled From Northern Lights to Urban Trails showing all the resources required to build and run a snowmobile. 2007. PDAC Mining Matters and the Geological Survey of Canada. Authors: Karen Wallace Dudley and Godfrey Nowlan
- Northern British Columbia Geological Landscapes Highway Map, Geological Survey of Canada, Popular geoscience 94E (also BC Geological Survey, Geofile 2007-1), 2007, Author: Bob Turner.
- A series of 32 Popular Geoscience Fact Sheets in English and French on minerals and energy, written and produced by Geological Survey of Canada, Calgary and co-published with IYPE and Geological Association of Canada; Inuktitut translations still in preparation; available at www.gac.ca/populargeoscience
- Co-sponsorship with Via Rail of a new Canadian Broadcasting Corporation fivepart television series called *A Geologic Journey* (<a href="www.cbc.ca/geologic">www.cbc.ca/geologic</a>). The series was shown in September and October 2007 and an advertisement for IYPE was shown twice during each broadcast. The advertisement is available for viewing at <a href="www.EarthSciencesCanada.com/iype">www.EarthSciencesCanada.com/iype</a>.
- *GeoTime Trail*, Waterloo, Ontario (developed by Alan Morgan). The trail is 4.567 km long, the distance corresponding to the age of the Earth at 4.567 billion years. Every metre along the trail represents one million years of geological time and there are interpretive signs at appropriate measured intervals that elucidate local geology in the context of major planetary events. The first part of this trail was opened on 21 October 2007.
- A bilingual IYPE portal and web site was established at <u>www.EarthSciencesCanada.com</u> in 2007 as a place to provide background on IYPE and to showcase projects as they developed.
- An Earth Science Careers Web Site for young people who want to know more about the many and varied jobs in earth sciences was developed and released in early 2009 at <a href="www.EarthSciencesCanada.com/careers">www.EarthSciencesCanada.com/careers</a>. The principal developer was Jenn Sabean, who worked with a committee of the Canadian Geoscience Education Network (CGEN) under the chairmanship of John Clague to prepare the site. Funds from IYPE made the project a reality. The site is designed to be attractive to the younger generation and also to provide comprehensive information on the nature of earth science-related jobs, what you need to qualify for entry to programs, how much you can make and the great variety of opportunities that exist.
- An *interpretive sign* was erected at Big Hill Springs Provincial Park, west of Calgary, Alberta in Spring 2009; it was developed by the Alberta Geological Survey with help from IYPE. The sign explains the origin of the natural springs and their tufa cliffs.

- The WHERE Challenge was developed to make young people aware of the importance of Earth resources in their daily lives. It asked Canadians aged 10-14 to answer two simple questions: What on Earth is in your stuff and where on Earth does it come from? Entrants could pick any everyday object and explain one or more of the non-renewable resources that it contained. The contest was conducted in the winter of 2008 with completion in April 2009. Entries were encouraged and received in all formats: poems, essays, videos, audio files, presentations and posters. Thirty-three regional finalists won prizes ranging from \$250 to \$100 in each of seven regions. The finalists were then re-judged for major national prizes of \$3000, \$2000 and \$1000. The winning entries showed that students in this age group are extremely creative and the entries are available for viewing at: <a href="www.earthsciencescanada.com/where">www.earthsciencescanada.com/where</a>. This contest is running for a second year in 2010.
- Co-sponsor of book entitled *A Burgess Shale Primer: History, Geology and Research Highlights* edited by Jean-Bernard Caron and David Rudkin and published by the Burges Shale Consortium in association with the International Conference on the Cambrian Explosion held in Banff, August 2009, celebrating 100 years since the discovery of the Burgess Shale by Charles Walcott.
- A major project that will be completed in 2010 is a book entitled *Four Billion Years and Counting: Canada's Geological Heritage*. It will feature many beautiful photographs, hundreds of new illustrations and text that describes Earth processes, the geological evolution of Canada and the social impact of Earth sciences in the country. It is being developed as a grassroots project with the latest science provided by experts and developed into reader-friendly text by teams of reviewers and the editors. After the book has been published, most of the illustrations will be available on-line for free download by educators and others. Find out more details about this exciting new book at <a href="http://earthsciencescanada.com/4by/">http://earthsciencescanada.com/4by/</a>.
- A major project under way in 2010 is called *Geovistas*. This project is to produce brochures with descriptions of accessible iconic views in National Parks explaining the geologic features in the view. It is being conducted with Grasslands National Park in southern Saskatchewan (Fran Haidl, leader) and Jasper National Park in Alberta (Larry Lane, leader). The template has been created and data are currently being collected for several brochures.

#### PUBLICITY PRODUCTS AND PUBLICATIONS

- Article by in Jim Teller and Sandra Barr entitled *The International Year of Planet Earth:* 2008 published in 2006 in Geoscience Canada, v. 33, p. 97-99.
- Brochure (8 pages, 8.5"x11") with list of proposed projects for prospective donors, 2007.
- Simple brown, card-style, brochure, folded 4.5"x9" advertising IYPE, 2008
- Article in Atlantic Geoscience Society Newsletter, January 2008, Author: John Boyd.

- Article by Godfrey Nowlan entitled *Canada celebrates the International Year of Planet Earth* published in 2008 in Geoscience Canada, v. 35, p. 7-11.
- WHERE Challenge poster and card flier for 2008-2009 contest
- Advertisement for the WHERE Challenge in a supplement to the Calgary Herald, 17 August 2008
- Article on IYPE in *Nouvelles* newsletter of the Ordre des géologues du Québec, 25 July 2008, Author : Michel Jebrak.
- Article on WHERE Challenge in Atlantic Geoscience Society Newsletter, October 2008
- Article on Canada's IYPE Program in the International GeoExpro Magazine,
   February 2008, p. 16, International Year of Planet Earth: Canada Making Good Progress, author: Godfrey Nowlan
- WHERE Challenge insert (comic) in Halifax Chronicle Herald, January 2008, Discovery Centre and Atlantic Geoscience Society
- Article entitled *Canada Celebrates International Year of Planet Earth* by Godfrey Nowlan appeared in EOS, an American Geophysical Union publication, v. 90, no. 35, September 2009.
- Earth Science Careers web site advertising cards distributed (22,000 in 2009).
- Advertisement for Earth Science Careers web site in Canadian School Counsellor Magazine, March 2009
- WHERE Challenge card flier for 2009-2010 contest, produced in September 2009
- Advertisement for Earth Science Careers web site in Canadian School Counsellor Magazine, December 2009 and January 2010 in on-line edition.

#### TALKS AND POSTERS

- Talk on the fossils of Canada given to the Alberta Palaeontolgical Society, Calgary, 17 March 2007.
- Rock 'n' Fossil Road Show, Forest Lawn Library, 5 April 2007, Calgary, Alberta; 150 public participants.
- Talk at Geological Association of Canada Mineralogical Association of Canada Annual Meeting, Yellowknife, May 2007: Four Billion Years and Counting: Canada's Geological Heritage: 2007 progress report on a popular book project. Abstracts, v. 32, p. 59, delivered by Godfrey Nowlan.
- Talk at Association of Earth Science Editors Annual Meeting, Calgary, September 2007, Four Billion Years and Counting: Canada's Geological Heritage: So many contributors, so little time, Abstracts, p. 7, delivered by Godfrey Nowlan.
- Talk at Association of Earth Science Editors Annual Meeting, Calgary, September 2007, *International Year of Planet Earth: A golden opportunity for outreach*, Abstracts, p. 7, 8, delivered by Godfrey Nowlan.
- Keynote speech at the Atlantic Geoscience Society Annual Meeting, 2 February 2008, Dartmouth, Nova Scotia: *Earth to Canadians: Communicating Earth Science in the International Year of Planet Earth* delivered by Godfrey Nowlan.

- A talk to the Saanich Women's Active Newcomers Society, Victoria, B.C., February 28, 2008: *Geological history of the southern Vancouver Island area*, delivered by Eileen van der Flier Keller, 27 people.
- Beyond the Last Billion Years talk series at the Museum of Natural History in Halifax, Nova Scotia (February to April 2008) sponsored by the Atlantic Geoscience Society
- Keynote speech at the Calgary Mining Forum, 15 April 2008, Getting to Know Our Planet in the International Year of Planet Earth delivered by Godfrey Nowlan.
- Presentation to Peninsula Newcomers, Victoria, B.C., April 2008, *Earth Science* and *Society The International Year of Planet Earth*, delivered by Eileen van der Flier Keller 50 people.
- Talk to Campbell River Elder College and Ripple Rock Gem and Mineral Club, April 2008: *Reading the Rocks Geology of Vancouver Island*, delivered by Eileen van der Flier Keller, 75 people.
- A series of five lunch-time addresses on the WHERE theme at the 76<sup>th</sup> Annual Meeting of the Association francophone pour le savoir (ACFAS) in Quebec City, 5-9 May 2008.
- Poster at C3GEO Convention, Calgary, May 2008 Four Billion Years and Counting: A book to celebrate Canada's Geoheritage and International Year of Planet Earth, Abstracts, p. 690-691.
- Talk at C3GEO Convention, Calgary, May 2008, *The International Year of Planet Earth: Helping to build Canadians' understanding of earth sciences and earth scientists*, Abstracts p. 981-982, delivered by John Boyd, Godfrey Nowlan and Jim Reimer.
- Poster at the GAC-MAC meeting in Quebec, May 2008, Four Billion Years and Counting: A book to celebrate Canada's Geoheritage and International Year of Planet Earth, Abstract CD.
- Talk at the GAC-MAC meeting in Quebec, May 2008, *The International Year of Planet Earth: Helping to build Canadians' understanding of our geoheritage*, Abstract CD, delivered by Godfrey Nowlan.
- A talk to the Kitchener-Waterloo Gem and Mineral Club on 7 November 2008, *A brief tour through the world of hydrothermal dolomite: Fabulous mineral specimens shrouded in scientific controversy*, presented by Jim Reimer.
- Saskatchewan Geological Society school and public lectures, 5 and 6 November 2008, Regina, *Earthquakes*, *Volcanoes and Tsunamis* presented by John Clague; 350 students attended school lectures and 100 people attended the public lecture.
- Saskatchewan Geological Society public lecture, 2 December 2008, Saskatoon, Touching the Red Planet: the Geology of Mars from Meteorites to Mission, presented by Chris Herd; ~ 200 people. Handouts were distributed on the WHERE Challenge and Careers website.
- Saskatchewan Energy and Resources Open House, 2 4 December 2008, Saskatoon, IYPE poster featuring Careers website, WHERE Challenge and SK IYPE activities.

- A series of twelve public lectures held at the Johnson GEO CENTRE in St. John's Newfoundland, 2008-2009, attracted 1200 people; newspaper reports for some of these. Lectures organized by the Geological Survey of Newfoundland and Labrador.
- Talk at the Joint Assembly (AGU, GAC, MAC), Toronto, May 2009, *Celebration of the International Year of Planet Earth in Canada: A Work in Progress*, delivered by Godfrey Nowlan.
- Poster at the American Geophysical Union Meeting in San Francisco, November 2009 on IYPE Program in Canada.
- Saskatchewan Energy and Resources Open House, November 30 December 2 2009, Saskatoon, IYPE poster featuring FBY, Grasslands Geovistas, Careers website, and WHERE Challenge (including copy of story by Saskatoon student that won first prize in SK-Manitoba region).
- Saskatchewan Geological Society public lecture, 1 December 2009, Saskatoon, *Ancient Treasure Chests: The Fantastic Dinosaur Bonebeds of Mongolia, China and Alberta*, presented by David Eberth, 200 people.

#### **EVENTS**

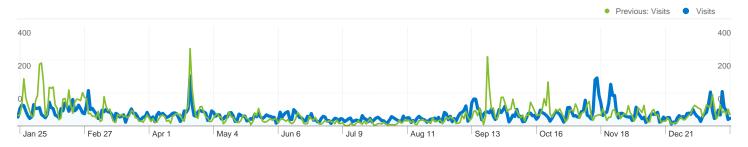
- IYPE Launch Event held on Earth Day, 22 April 2008 at the Canadian Museum of Science and Technology with 300 school children in attendance. Talks were presented by Steve MacLean (astronaut), Alain Plouffe (GSC), John Clague (SFU) and Anne Therriault (GSC). Minister John Baird and John Boyd presided.
- EdGEO workshop for grade 7 teachers held in Calgary on 24 February 2007, 30 participants.
- Rock 'n' Fossil Road Show, Fish Creek Library, 31 March 2007, Calgary, Alberta; 350 public participants.
- IYPE Launch Event in Manitoba *International Year of Planet Earth: Earth Sciences for Society*, 2007, at University of Winnipeg with Steven Fletcher (geological engineer and MP for Charleswood-St. James-Assiniboine-Headingly) who is Honorary Chair of IYPE in Manitoba.
- Science Council of Manitoba (Youth Encouraging Sustainability YES Program) put on a youth forum on the challenge for a sustainable future, 28-30 September 2007, 200 participants. Included talk on IYPE by Jim Teller.
- Rock 'n' Fossil Road Show, Country Hills Library, 13 October 2007, Calgary, Alberta; 300 public participants.
- EdGEO Workshop on Rocks and Minerals (grade 3), Calgary 27 October 2007, 28 participants.
- Launch of IYPE in Québec at Quebec Exploration 2007 at Chateau Frontenac in Quebec City, 26-29 November 2007. Talk by Robert Marquis, poster and brochures displayed.
- Launch of IYPE in Atlantic Canada combined with the Atlantic Geoscience Society's 35<sup>th</sup> Birthday Party, 1 February 2008, Dartmouth, Nova Scotia.
- Nine workshops at Showcase 2008 for K-12 teachers, in Regina and Saskatoon, SK, 20 February 2008, put on by Saskatchewan Geological Society,

- Rock 'n' Fossil Road Show, Forest Lawn Library, 5 April 2007, Calgary, Alberta; 150 public participants.
- Announcement of WHERE Challenge winners on Earth Day, 22 April 2008.
- Nuna-Gussow Conference 2008 on Geoscience of Climate Change, 20-23
   October, 2008, Banff Centre, Banff Alberta; Canadian Society of Petroleum Geologists and Geological Association of Canada.
- EdGEO Teacher Workshop in Nova Scotia, 20-21 August 2008, 20 participants.
- Central Atlantic Conjugate Margins Conference, 13-15 August 2008, Halifax, Nova Scotia.
- IYPE Symposium on *Climate and the Quaternary record of Canada* at GAC-MAC meeting, Quebec City, May 2008.
- IYPE themes and banners at GAC-MAC meeting in Quebec City.
- Science Council of Manitoba (Youth Encouraging Sustainability YES Program) put on youth field camps focusing on project design and data collection in environmental projects, September 2008.
- Workshop for teachers on Earth Science in the Classroom held at the Chinook Teachers' Association Conference in Swift Current, 14 October 2008, Saskatchewan Geological Society, 25 participants.
- Four field excursions for the public entitled *Géologue d'un jour* run in Montreal by UQAM from 28 September to 26 October 2008.
- Belmont Secondary School in Victoria, BC adopted a project "Stewardship of the Belmont Landscape" and a "Green School Project" for 2008 in honour of IYPE.
- EdGEO Workshop for grade 10 earth science teachers at Catalyst 2008 BC Science Teachers Association, Kelowna, B.C., 65 participants.
- EdGEO Workshop for teachers of science on using the CBC Program *Geological Journey* in class at Catalyst 2008, BC Science Teachers Association, Kelowna, B.C., 42 participants.
- Two EdGEO workshops for teachers at School District 72 Professional Development Conference on the Ecology of Teaching, Campbell River, B.C., October 2008, 71 participants.
- Rock 'n' Fossil Road Show, Crowfoot Library, 18 October 2008, Calgary, Alberta; 350 public participants.
- EdGEO Workshop for teachers called "Hands-on Plate tectonics" at Odyssey Symposium 2008 Wild About Science, Richmond, B.C., 20 participants.
- Three EdGEO workshops for student teachers at the University of Victoria, October 2008, 47 participants.
- IYPE Photo Contest at GEOTOP, Montreal, Quebec, 2008-2009 for students and researchers with an exhibition of the winners at the Symposium de science et technologie de la Commission scolaire de Montreal, 23-24 April 2009.
- International Conference on the Cambrian Explosion, Banff, Alberta, August 2009.
- EdGEO Workshop for grade 7 teachers on Planet Earth held in Calgary on 7 November 2009, 25 participants.

#### INTERNATIONAL COLLABORATION

- Attendance of John Boyd, Jim Teller and Roberta Bondar at opening event for IYPE in Paris, 2007
- Jim Teller as a member of the International Board of IYPE
- Sets of products sent to the student geology club at the University of Botswana Gaborone, Botswana.
- Jim Teller chaired IYPE symposium on *Lacustrine Records as Archives of Climate Change* at International Geological Congress in Oslo, August, 2008.
- Chris Brooks of University of Montreal collaborated with South Africa's IYPE National Committee to develop resources for educating teachers and for use in schools <a href="https://www.assemblingspaceshipearth.com">www.assemblingspaceshipearth.com</a>
- Two students identified and sent to the closing IYPE Conference in Lisbon, November 2009.
- Attendance of John Boyd and Jim Teller at the IYPE Conference in Lisbon, November 2009.

#### **Dashboard** Comparing to: Jan 24, 2009 - Jan 23, 2010



#### Site Usage



Previous: 16,875 (-1.58%)

47,736 Pageviews

Previous: 46,691 (2.24%)

2.87 Pages/Visit

Previous: 2.77 (3.88%)



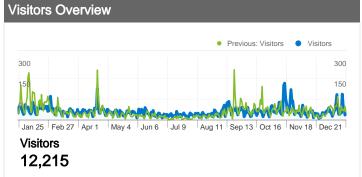
Previous: 50.49% (1.31%)

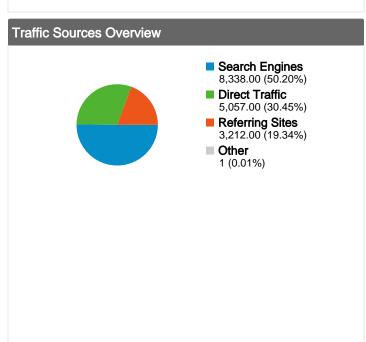
#### u 00:03:20 Avg. Time on Site

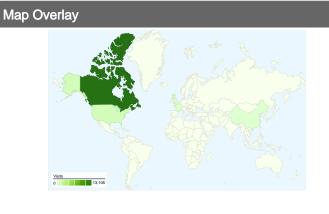
Previous: 00:03:09 (5.97%)

#### 71.86% % New Visits

Previous: 69.48% (3.42%)

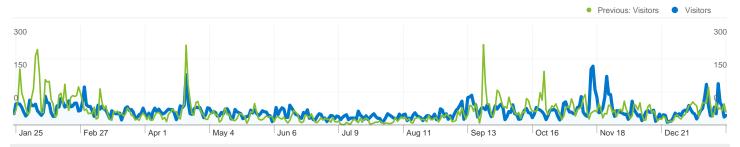








Content Overview		
Pages	Pageviews	% Pageviews
/where/		
Jan 24, 2010 - Jan 23, 2011	7,709	16.15%
Jan 24, 2009 - Jan 23, 2010	10,752	23.03%
% Change	-28.30%	-29.87%
/careers/		
Jan 24, 2010 - Jan 23, 2011	7,100	14.87%
Jan 24, 2009 - Jan 23, 2010	4,703	10.07%
% Change	50.97%	47.66%
1		
Jan 24, 2010 - Jan 23, 2011	5,248	10.99%
Jan 24, 2009 - Jan 23, 2010	8,540	18.29%
% Change	-38.55%	-39.89%
/where/results.html		
Jan 24, 2010 - Jan 23, 2011	2,828	5.92%
Jan 24, 2009 - Jan 23, 2010	3,116	6.67%
% Change	-9.24%	-11.23%
/careers/how-much-can-i-make.html		
Jan 24, 2010 - Jan 23, 2011	2,410	5.05%
Jan 24, 2009 - Jan 23, 2010	1,728	3.70%
% Change	39.47%	36.41%



## 12,215 people visited this site

16,608 Visits

Previous: 16,875 (-1.58%)

12,215 Absolute Unique Visitors

Previous: 12,019 (1.63%)

47,736 Pageviews

Previous: 46,691 (2.24%)

2.87 Average Pageviews

Previous: 2.77 (3.88%)

00:03:20 Time on Site

Previous: 00:03:09 (5.97%)

51.16% Bounce Rate

Previous: 50.49% (1.31%)

71.86% New Visits

Previous: 69.48% (3.42%)

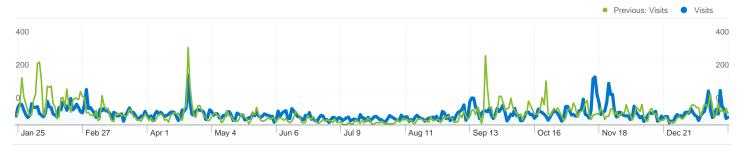
## **Technical Profile**

Browser	Visits	% visits
Internet Explorer		
Jan 24, 2010 - Jan 23, 2011	8,801	52.99%
Jan 24, 2009 - Jan 23, 2010	10,522	62.35%
% Change	-16.36%	-15.01%
Firefox		
Jan 24, 2010 - Jan 23, 2011	4,096	24.66%
Jan 24, 2009 - Jan 23, 2010	4,145	24.56%
% Change	-1.18%	0.41%

Connection Speed	Visits	% visits
Cable		
Jan 24, 2010 - Jan 23, 2011	5,634	33.92%
Jan 24, 2009 - Jan 23, 2010	5,342	31.66%
% Change	5.47%	7.16%
Unknown		
Jan 24, 2010 - Jan 23, 2011	3,744	22.54%
Jan 24, 2009 - Jan 23, 2010	4,862	28.81%
% Change	-22.99%	-21.76%

3

## **Traffic Sources Overview**



### All traffic sources sent a total of 16,608 visits



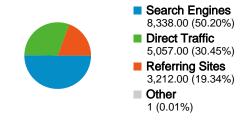
Previous: 37.21% (-18.18%)

19.34% Referring Sites

Previous: 22.37% (-13.55%)

50.20% Search Engines

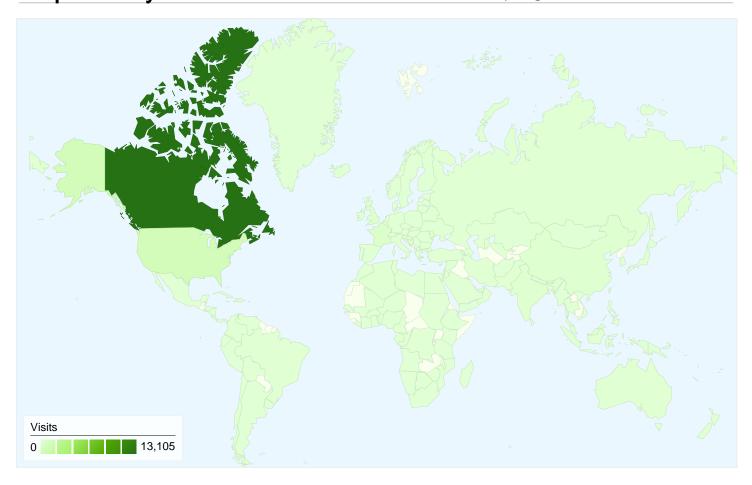
Previous: 40.41% (24.22%)



## **Top Traffic Sources**

Sources	Visits	% visits
google (organic)		
Jan 24, 2010 - Jan 23, 2011	7,937	47.79%
Jan 24, 2009 - Jan 23, 2010	6,417	38.03%
% Change	23.69%	25.68%
(direct) ((none))		
Jan 24, 2010 - Jan 23, 2011	5,057	30.45%
Jan 24, 2009 - Jan 23, 2010	6,280	37.21%
% Change	-19.47%	-18.18%
geoscience.ca (referral)		
Jan 24, 2010 - Jan 23, 2011	305	1.84%
Jan 24, 2009 - Jan 23, 2010	290	1.72%
% Change	5.17%	6.86%
ggl.ulaval.ca (referral)		
Jan 24, 2010 - Jan 23, 2011	264	1.59%
Jan 24, 2009 - Jan 23, 2010	212	1.26%
% Change	24.53%	26.53%
saskmining.ca (referral)		

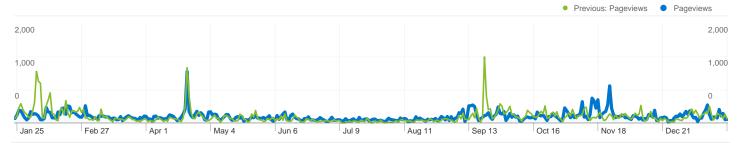
Keywords	Visits	% visits
where challenge		
Jan 24, 2010 - Jan 23, 2011	1,047	12.56%
Jan 24, 2009 - Jan 23, 2010	1,313	19.25%
% Change	-20.26%	-34.78%
earth science careers		
Jan 24, 2010 - Jan 23, 2011	261	3.13%
Jan 24, 2009 - Jan 23, 2010	76	1.11%
% Change	243.42%	180.90%
earth science canada		
Jan 24, 2010 - Jan 23, 2011	213	2.55%
Jan 24, 2009 - Jan 23, 2010	131	1.92%
% Change	62.60%	32.99%
earth science		
Jan 24, 2010 - Jan 23, 2011	204	2.45%
Jan 24, 2009 - Jan 23, 2010	24	0.35%
% Change	750.00%	595.25%
careers in earth science		



## 16,608 visits came from 163 countries/territories

Site Usage							
Visits 16,608 Previous: 16,875 (-1.58%)	Pages/Visit 2.87 Previous: 2.77 (3.88%)	00:03:20		% New Visits 71.92% Previous: 69.51% (3.47%)	Bounce Rate 51.16% Previous: 50.49% (1.31%)		
Country/Territory		Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate	
Canada							
January 24, 2010 - Ja	nuary 23, 2011	13,105	3.05	00:03:29	68.87%	48.68%	
January 24, 2009 - Ja	nuary 23, 2010	13,937	2.87	00:03:18	65.75%	48.47%	
% Change		-5.97%	6.30%	5.37%	4.76%	0.43%	
United States							
January 24, 2010 - Ja	nuary 23, 2011	991	2.19	00:02:43	86.68%	63.77%	
January 24, 2009 - Ja	nuary 23, 2010	1,236	2.43	00:02:39	86.41%	56.96%	
% Change		-19.82%	-10.10%	2.66%	0.32%	11.97%	
France							
January 24, 2010 - Ja	nuary 23, 2011	366	2.20	00:02:14	75.96%	61.48%	

# www.earthsciencescanada.com Content Overview



## Pages on this site were viewed a total of 47,736 times

47,736 Pageviews

Previous: 46,691 (2.24%)

33,298 Unique Views

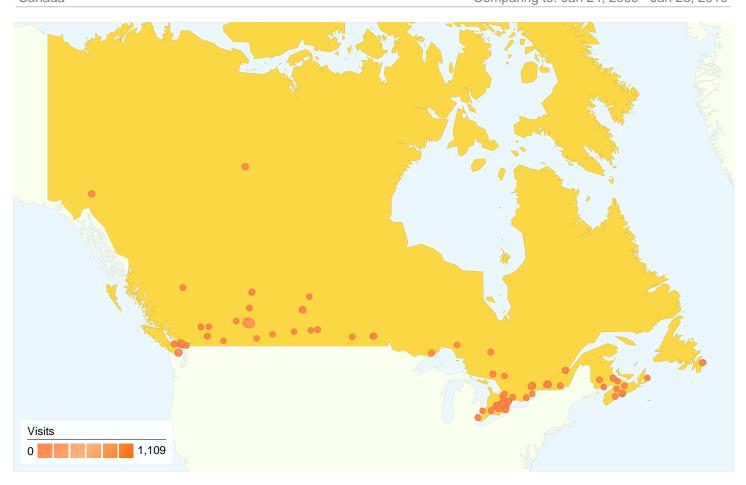
Previous: 31,899 (4.39%)

51.16% Bounce Rate

Previous: 50.49% (1.31%)

## **Top Content**

Pages	Pageviews	% Pageviews
/where/		
Jan 24, 2010 - Jan 23, 2011	7,709	16.15%
Jan 24, 2009 - Jan 23, 2010	10,752	23.03%
% Change	-28.30%	-29.87%
/careers/		
Jan 24, 2010 - Jan 23, 2011	7,100	14.87%
Jan 24, 2009 - Jan 23, 2010	4,703	10.07%
% Change	50.97%	47.66%
/		
Jan 24, 2010 - Jan 23, 2011	5,248	10.99%
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% Change	-38.55%	-39.89%
/where/results.html		
Jan 24, 2010 - Jan 23, 2011	2,828	5.92%
Jan 24, 2009 - Jan 23, 2010	3,116	6.67%
% Change	-9.24%	-11.23%
/careers/how-much-can-i-make.html		



## This country/territory sent 13,105 visits via 981 cities

Visits 13,105 Previous: 13,937 (-5.97%)	Pages/Visit 3.05 Previous: 2.87 (6.30%)	<b>00:03:</b> Previous:		% New Visits 68.87% Previous: 65.75% (4.76%)	Bounce 48.68 Previous 48.479	%
City		Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
Calgary						
January 24, 2010 - Janua	ary 23, 2011	1,109	2.71	00:02:39	43.64%	55.82%
January 24, 2009 - Janua	ary 23, 2010	0	0.00	00:00:00	0.00%	0.00%
% Change		100.00%	100.00%	100.00%	100.00%	100.00%
Calgary						
January 24, 2010 - Janua	ary 23, 2011	766	3.59	00:04:01	53.79%	53.26%
January 24, 2009 - Janua	ary 23, 2010	0	0.00	00:00:00	0.00%	0.00%
% Change		100.00%	100.00%	100.00%	100.00%	100.00%
Vancouver						

Financial Statements (Unaudited - see Notice to Reader)

March 31, 2010, 2009 and 2008

#### Financial Statements (Unaudited - see Notice to Reader)

### March 31, 2010

	Page	
Notice to Reader	3	
Statements of Operations and Changes in Net Assets	4	
Statement of Financial Position	5	
Notes to the Financial Statements	6	

## CHARTERED ACCOUNTANTS

MacKay LLP

Elveden House 1700, 717 – 7<sup>th</sup> Avenue SW Calgary, AB T2P 0Z3

Phone:(403) 294-9292 Fax:(403) 294-9262

www.MacKay.ca



#### Notice to Reader

On the basis of information provided by the organization, we have compiled the statement of financial position of International Year of Planet Earth Canada as at March 31, 2010, 2009 and 2008 and the statements of operations and changes in net assets for the periods then ended.

We have not performed an audit or a review engagement in respect of these financial statements and, accordingly, we express no assurance thereon.

Readers are cautioned that these statements may not be appropriate for their purposes.

These financial statements were compiled solely for the use of International Year of Planet Earth Canada. MacKay LLP makes no representation of any kind to any other person in respect of these financial statements and accepts no responsibility for their use by any other person.

Calgary, Canada April 28, 2010

**Chartered Accountants** 

Markay LLP

Statements of Operations and Changes in Net Assets (Unaudited - see Notice to Reader)

						From nception otober 7,
	4.00	ar ended arch 31, 2010	10000000	ar ended larch 31, 2009		o March 31, 2008
Revenues						
Contributions - general	\$	12,000	\$	40,750	\$	15,000
Contributions - Career website	*	17,000	70	30,000	18.	20,000
Contributions - WHERE 2009		29,500		84,870		5
Contributions - WHERE 2010		50,000				570
Contributions - 4 Billion Years		55 B		75,500		57.0
Contributions - Burgess Shale		-		10,000		-
		108,500		241,120		35,000
Expenditures						
Advertising and promotion		2,254		18,148		11,204
Amortization		3,693		3,520		-
Burgess Shale expenses		10,000		-		-
Careers website expenses		24,652		40,071		-
4 Billion Years expenses		1,456		7,161		-
Geo Vistas expenses		475		-		9
Interest and bank charges		2		19		-
Professional fees		3,000				-
Travel and meetings		439		15,469		-
WHERE 2009 expenses		22,955		84,865		-
WHERE 2010 expenses		18,751				-
		87,677		169,253		11,204
Excess of revenues over expenditures		20,823		71,867		23,796
Net assets, beginning of periods		95,663		23,796		
Net assets, end of periods	\$	116,486	\$	95,663	\$	23,796

Statement of Financial Position (Unaudited - see Notice to Reader)

	M	larch 31, 2010	M	larch 31, 2009	M	arch 31, 2008
Assets						
Current Cash	\$	115,793	\$	91,033	\$	23,796
Website		3,693		7,040		
	\$	119,486	\$	98,073	\$	23,796
Liability						
Current Accounts payable	\$	3,000	\$	2,410	\$	
Net assets		116,486		95,663		23,796
	\$	119,486	\$	98,073	\$	23,796

Approved by the Board:	
	Members
	Members

Notes to the Financial Statements (Unaudited - see Notice to Reader)

#### March 31, 2010, 2009 and 2008

#### 1. Basis of preparation

These financial statements are prepared for internal reporting purposes only. As these financial statements have not been prepared for general purposes, readers may require further information.

#### 2. Organization

The organization was incorporated subsequent to the year end on May 17, 2010, under Part 9 of The Companies Act of the Province of Alberta as a non-profit company as IYPE Canada Ltd.