

**Canadian Geoscience Education Network Annual Meeting**  
**11:00 a.m. – 1:00 p.m., May 27, 2007**  
**Auditorium, Prince of Wales Heritage Museum**  
**Yellowknife, NWT**

*Present:* Jan Aylsworth, Diane Baldwin, Charly Bank, Brian Briggs, Kate Bruce, Laura Clinton, Steven Daniel, Tania Demchuk, Allan Donaldson, Jon Dudley, Dixon Edwards, John Etches, Fran Haidl, Linda Ham, Russell Hartlaub, Brian Hitchon, David Huntley, Mike Jackson, Larry Lane, Karen Lochhead, Gayla Meredith, Ward Neale, Godfrey Nowlan, Linda Popoff, Donna Schreiner, Eileen van der Flier Keller, Christy Vodden Miriam Vos-Guenter, Erica Williams, Ian Young

**Some Background: A Historic Meeting!**

This was a much-abbreviated annual meeting, but it was held as part of a three-day extravaganza of outreach and education, comprising an extraordinary outreach session and workshop, pulled together by Godfrey Nowlan and Donna Schreiner. There were 26 presentations at the session, making it the biggest one ever (for outreach that is) at a Geological Association of Canada (GAC) conference – now that’s a historic first! Equally historic, it was also the largest technical session at the conference. Attendance at it was a steady 50 or so, peaking as high as 80. The workshop was full, with over 30 registrants; 47 people went on the superb field trip to Giant Section, led by Al Donaldson. Nine teachers attended the conference, six funded by the Canadian Geological Foundation and the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories and Nunavut. A workshop report will appear shortly in “Geoscience Canada.” A summary of the questions debated and the resulting conclusions, recommendations and priorities for future action is attached as Appendix 1 (Note: this was copied into Word from the original PowerPoint presentation, which is available from Godfrey, Donna or me).

Of further historic note, this was CGEN’s first North of 60° meeting.

**Report of the President** (Fran Haidl)

The first order of business was a big thank you to Godfrey and Donna, and everyone else involved in the running of the Yellowknife conference. Further to discussions at the winter meeting about the priority need to build climate change and environment themes into the activities of the earth science community and to ensure that earth scientists have a strong voice in the public discussion, Fran reported that this would be on the agenda of the June meeting of the Canadian Federation of Earth Sciences (CFES), as it was clearly a broader initiative than just CGEN.

**Report of the Secretary-Treasurer** (Christy Vodden)

The CGEN bank balance as of April 30, 2007 was \$17,149.60. Of that, \$11,784.22 is general CGEN funds. The remaining \$5,365.38 is being managed for the Careers in Earth Sciences project, representing a \$365.38 carry-over from 2005-2006 and a \$5,000

allocation approved by the Executive in February 2007. Incoming funds during 2006-2007 included the Canadian Geoscience Council allocation to CGEN (\$5K) for 2005-2006 received June 2006, and \$210 from the trilobite tee-shirt fundraiser. (*Action: Fran will discuss continued support from CFES at the June meeting*). Outgoing funds totalled \$5,241, as detailed in the 2006-2007 financial report, attached as Appendix 2.

CGEN membership has tripled over the past five years. Since the last AGM, we have gained almost 30 members. The goal for 2007 is 250 (as of November we are at 240!).

The CGEN website was updated in the fall of 2006 and again in May 2007, when the new French website went online. Check it out at: <http://cgen.bio.ns.ca/>

### **Core CGEN Projects:**

#### **Careers in Earth Science initiative** (Fran Haidl for John Clague)

This is priority project for the immediate future for both CGEN and CFES. CGEN has allocated \$5K for content development, with additional top-up funds offered, if needed, by CFES. CFES will also help facilitate the web design phase, with funding to be sought through the International Year of Planet Earth (IYPE). Ian Young is chairing a small committee, with representatives from key professional earth science associations, to provide advice and assistance to the project. The committee is strongly supportive of the initiative, and this buy-in from across the community has given it a much-needed shot in the arm.

#### **EarthNet** (Godfrey Nowlan for Jennifer Bates)

As discussed at the workshop, EarthNet has the potential to grow into a “one-stop shop” for all things earth science, and this requires that a serious look be taken at how that could be achieved. Discussion is underway as to CFES hosting EarthNet on their website. The action plan for EarthNet’s future is still on the books.

#### **EdGEO** (Eileen Van der Flier-Keller)

2006 was a banner year for EdGEO with 17 workshops reaching an unprecedented 377 teachers across Canada. Encouraging steps were made toward the goal of long-term sustainability of workshops, with \$6,000 returned to EdGEO from workshop organizers who had secured alternate funding sources. The goal to reach out to student teachers was marked by a workshop for them at the University of Regina, which is a welcome addition to the one that has been held at the University of Victoria since 2005. For the future EdGEO is looking into developing a set of standardized curriculum-linked earth science workshops to complement the current EdGEO workshops. This initiative would require new funding, possibly through IYPE, and probably a permanent staff.

A sincere thank you goes to EdGEO’s long-term sponsors: CFES, Canadian Society of Petroleum Geologists, GAC and Mineralogical Association of Canada (MAC), although EdGEO is fast becoming a victim of its own success, and is working at the very outer limits of its funding base. Additional funding is required to ensure EdGEO’s ability to

meet the demands coming in. Another thank-you goes to the newsletter editor David Mate and all the contributors.

**Friends of Canadian Geoheritage** (Al Donaldson)

The Ottawa-Gatineau Geoheritage Project is very active in the National Capital Region, with a presence at many community events, public lectures, field trips, brochures, and lobbying at the municipal/regional levels. It is hoped that other centres will institute similar groups aimed at promoting and preserving their local geoheritage. Al noted that gem and mineral shows are excellent venues, as they pull in good crowds of people with an interest in geoheritage. Other good connections are with the Riverkeepers network and any parks (local, provincial/territorial, national) in the region.

There was discussion about a broad-brush concept put forth by a Geological Survey of Canada scientist, Rod Klassen. He envisions a megaproject that would reconstruct the map of Canada using geology that reflects actual regional characteristics, and this would be a theme-park style of tourist development with a strong education component. All agreed that it was an interesting idea, but would require massive funding and a very energetic champion. Its physical location would be a prickly issue. Something to put on the very long wish list!

**Geoscape** (Christy Vodden for Bob Turner)

Geoscape projects are continuing to shift focus and build new partnerships for content, funding and distribution. Bilingual lesson plans for many Geoscape projects are on the website (<http://www.geoscape.nrcan.gc.ca/>). For the Toronto Geoscape, there are additional ones, in English only at the moment, on the PDAC's Mining Matters website: <http://www.pdac.ca/miningmatters/teachers/resources.html> (see Aggregate Resources).

**What on Earth** (Christy Vodden for Alan Morgan)

The search for a new editor(s) is ongoing, and is a priority for the CGEN Executive. Alan and Peter Russell, who co-edit the publication, plan to step down at the end of 2008, following the publication of the 20<sup>th</sup> anniversary issue. (*Action: Any interested parties should contact Alan Morgan at [avmorgan@uwaterloo.ca](mailto:avmorgan@uwaterloo.ca)*).

**International Year of Planet Earth 2008** (Godfrey Nowlan for John Boyd)

The Canadian National Committee of IYPE, chaired by John Boyd, is in active fundraising mode for activities that will span the ramp-up year 2007 through the actual IYPE in 2008 and the ramp-down year in 2009. Currently there are about 15 proposals on the list totalling just over one million dollars. This is a major initiative that provides an excellent opportunity to tell the public about the earth sciences and why they are important, as well as to encourage young people to consider the earth sciences as a career option. All CGEN members are invited/urged to position their projects/activities during this timeframe under the IYPE banner. New ideas/proposals may still be submitted to John Boyd ([johnb@BoydPetro.com](mailto:johnb@BoydPetro.com)) with a cc to Godfrey ([gnowlan@nrcan.gc.ca](mailto:gnowlan@nrcan.gc.ca)) in a one-two page document outlining key details (summary of idea, participants and partners, target audience, timelines, budgets, impact and link with IYPE goals/messages). Check

out <http://iypecanada.org> to get your creative juices flowing (click on Media Kit to see latest news and current list of projects).

**2008 Conference: CGEN Participation** (Fran Haidl)

CGEN will co-sponsor a geoheritage symposium, being convened by Serge Perrault and Pierre Verpaelst, at the next GAC/MAC/Society of Economic Geologists (SEG) conference to be held in Quebec City, May 26-28, 2008. The goal is to integrate education and outreach into it and to encourage international participation. Teacher participation will require a special effort to secure funding, and Fran and Eileen will discuss plans and funding with Serge. Note: If you are planning on attending this conference, book early as Quebec City will be bursting at the seams as it celebrates its 400<sup>th</sup> anniversary in 2008. Conference website is <http://quebec2008.net>.

**LITHOPROBE** (via e-mail from Ron Clowes)

Key Porter has published a soft-cover version of the children's book "Dancing Elephants and Floating Continents" by John Wilson, and is selling it for the very reasonable cost of \$11.95 (there had been concerns that the higher priced hard-cover version would limit sales to educators). Ron and John are co-authoring a book on LITHOPROBE aimed at the interested adult public, which will also be published by Key Porter, with an anticipated publication date of spring 2008. LITHOPROBE continues to get requests for its materials for educational and related purposes, including:

- 1) Map and interpreted cross sections for the Slave-Wopmay Orogen results from NWT, plus map and interpreted cross sections for the northern and southern Cordillera: all for an updated textbook on tectonics.
- 2) Photo of the vibroseis trucks requested from Scholastic Canada, which is producing a book on the rock cycle for Grade 4 students in Canada.
- 3) Selection of material for a two-page spread in a new earth science text for the NWT being prepared through UBC's Faculty of Education.
- 4) Cross section of the southern Cordillera for a BC Hydro report on seismic hazards.

**Timing for next meeting**

The winter meeting will be held in Vancouver on February 1, 2008, the day following the Cordilleran Roundup, January 28-31.

In the interest of broadening participation in CGEN meetings and encouraging information exchange, CGEN Executive members will continue to try to arrange regional meetings across the country linked to their travel and to other key meetings of the earth science community (Prospectors and Developers Association, Canadian Institute of Mining and Metallurgy, CFES, etc.). Anyone, at anytime, is welcome to set up a meeting of CGENers in his/her neighbourhood. Just a thought!

Christy Vodden  
Secretary-Treasurer  
November 26, 2007

**Slide 1:**

***How can Earth Sciences increase its representation in school curricula?***

*OBJECTIVES*

- Produce earth science literate citizens
- Make school students aware of earth science and its related career possibilities (resources, environment, oceans, atmosphere)
- Attract a proportion of school leavers into earth science related job

**Question:**

- Geology as a subject or a synthetic science?  
(cf. Exxon-Mobil Foundation)

**Slide 2:**

***How can Earth Sciences increase its representation in school curricula?***

- Get Earth Science “wedged” into PCBs and Geography in school curricula:
  - Conduct survey of earth science content in existing curriculum
  - Become active on subject advisory committees
- Make the importance of Earth Science in society known to educational authorities:
  - CGEN/CFES to contact ministers of education and possibly natural resources
  - Engage PDAC, CAPP in approaching governments
- Improve capacity of educators to teach and understand ES and its associated employment opportunities:
  - Professional development for teachers
  - Professional development for school counsellors
  - Outreach to parents
  - CFES to support curriculum evaluation

**Slide 3:**

***How can Earth Sciences increase its representation in school curricula?***

- Improve profile of ES in post-secondary institutions:
  - Get science recognized as a valid entry science subject in universities
  - CGEN/CFES contact Canadian Council of Chairs of Earth Science Departments
  - Put pressure on post-secondary to recognize earth science as a teachable subject
  - Combat the “rocks for jocks” reputation
  - Engage university counsellors
  - Point out unique values of ES: 3D skills, fuzzy data sets, team work

**Slide 4:**

***What obvious gaps are there in the array of ES outreach products and services?***

- Inventory of Existing Products:
  - Complete the inventory
  - Promote existing products
- Career Profiles:
  - Careers Web Site
- One-Stop Shop:
  - Improve EarthNet to full national level
  - Establish new shop?
- Infrastructure is missing:
  - (Paid people; part of next question)
- Links to tourism:
  - Travel brochures – short and local
  - Road-side signage
  - Radio narrations of geology (sat nav content?)
- Television Presence:
  - Shorts like Hinterland Who's Who?

**Slide 5:**

***What obvious gaps are there in the array of ES outreach products and services?***

- Get ES (back) into National and Provincial Parks:
  - Establish contacts with Interpretation Community
  - Workshops for park interpreters
  - Establish contacts with parks to encourage employment of earth scientists
- Internet-Based Initiatives:
  - Facebook, Chat rooms etc.
- (Re)Establish Contacts with Environmental, Heritage and Historic Societies
  - Riverkeepers
- Promote stronger links between ES, Education and Corporations
- Attach efforts to “green” initiatives which are funded

**Slide 6:**

***How can we reorganize ES outreach in order to accomplish more funded outreach in government, academe and industry?***

- Establish CGEN/CFES Office with 1.5 staff:
  - Raise funds to pay salaries for staff
  - Produce work plan for staff
  - Encourage professional secondments from industry, government and academe to the new office
  - Use existing professional labour in museums and science centres
  - Use provincial geotourism coordinators where they exist
- Conduct Survey of ES Awareness in Canada:
  - Contact CFES/Professional Survey Agencies/Media Outlets to gauge interest
- Conduct Studies of the Effectiveness of Existing Outreach Programs:
  - EdGEO, Geoscapes...
  - Contact Crystal Project

**Canadian Geoscience Education Network  
2006-2007 FINANCIAL REPORT**

Balance at last report (as of April 28, 2006)	+ \$17,180.60
<u>Incoming funds:</u>	
Trilobite t-shirt fundraiser, 16/05/06	+\$210
2005-2006 CGC contribution, 22/06/06	+\$5,000
Interest (May/06 – April/07)	<u>nil</u>
Total incoming:	+\$22,390.06
<u>Outgoing payments:</u>	
Earth Science Educators Unit , King/Lydon support 07/06/06	-\$1000
GAC/MAC 2006, AGM catering, 17/08/06	-\$319.90
J. Smith, website update, 14/12/06	-\$80
Yellowknife 2007, outreach workshop, 15/02/07	-\$250
2006-2007 allocation to EdGEO, 28/02/07	-\$3,000
SFU, winter meeting catering, 14/03/07	-\$379.10
Transcomm, translation of website, 09/04/07	-\$212
Total outgoing:	<u>\$5,241</u>

Internal allocation:

In February 2007, the Executive unanimously approved the allocation of \$5,000 to the Careers website project. The funds will be held in the CGEN account.

<b>BALANCE (as of April 30, 2007)</b>	<b>\$17,149.60</b>
CGEN portion:	\$11,784.22
Careers portion:	\$5,365.38*

\* Carry over for Careers project from 2005-2006 was \$365.38

Christy Vodden  
Secretary-Treasurer  
May 27, 2007