GEOLOGY AT QUEEN'S
THE SECOND DECADE

In 1970, Bruce Downing, an undergraduate student, compiled the first list of geology graduates, mainly, I suspect, based on records in the Alumni Office. According to Bruce, the graduating classes from May, 1905, to May, 1914, included 22 geologists. My records, based on annual reports contained in the university archives, list 33 geology graduates. I suspect the difference exists mainly because I am counting graduates of the Department of Mineralogy as geologists, and he is not. In this report, I am relying on data in the archives.

In 1905, we could only claim R.D. Guy of Camden East, who graduated with First Class Honours in Chemistry and Mineralogy. Downing lists George S. Malloch, (B.Sc., Eng.) of Hamilton as the only geology graduate of 1906. My records add another engineer, L.L. Bolton of Portland, three B.A.'s, Stuart Schofield of Kingston, G.M. Sharp of New Liskeard, and L.J. Williams of Watford, and two M.A.'s, James Hill of Harrington and Wyatt Malcolm of Woodstock. Downing has no 1907 graduates, but I list one B.A., Herbert White of Stratford, and four M.A.'s, Norman L. Bowen, Stuart Schofield, and Fredrick L. Sine, all from Kingston, and N.L. Turner of Hamilton. We agree that there were four engineering degrees awarded in 1908, to Andrew Fleming of Craigleith, James Hill, Stuart Schofield, and Fredrick Sine. We also agree on the list of grads in 1909, but I list one 1910 graduate that he assigns to 1911. I will deal with these years later.

In 1912, two engineering degrees were awarded, to Sydney McCann and Robert McDowall, and the first M.Sc. went to Lawrence Uglow. All were from Kingston. Cyril Greenland of Port Arthur was an engineering graduate in 1913, and no geology degrees were awarded in 1914.

Let us return to the remarkable class of 1909. All graduates were in engineering. The first both alphabetically and in stature was Norman L. Bowen. His father had a bake store on Market Square, and he attended Kingston Collegiate before entering Queen's. He earned his Ph.D. in 1912 at MIT, and returned to teach at Queen's in 1919. In 1920, he moved back to the Geophysical Laboratory of the Carnegie Institution of Washington, D.C., where, except for the years 1937 to 1945 when he taught at the University of Chicago, he spent the rest of his career. Of course, he is best known for his reaction series, and the Americans recently named him the outstanding petrologist of the twentieth century.

One of his classmates was E.L. (Louie) Bruce, from Smiths Falls. "Louie" went on to a B.A. at Queen's in 1911 and an M.A. and Ph.D. at Columbia in 1912 and 1915. After a short career with the GSC, he became a Queen's professor in 1920, and continued to teach here till 1949, the year he died. The Bruce Wing was named in recognition of his contributions to the Department.

After earning his B.Sc. in 1909, Bruce Rose from Calgary went on to a Ph.D. at Yale, then to the GSC. He resigned in 1920 to explore for oil in India, then returned in 1923 to begin a 32 year teaching career at Queen's.

J.A. Shirley King, from Souris, Manitoba, taught here in 1910-11 before going to the GSC. His classmate, Herbert White of Bottineau, North Dakota, was the only member of the class of '09 that did not contribute to that class's sixty-three years of teaching here.

The only 1910 graduate was Stanley Slipper from Port Arthur, who went into oil exploration. He became the first president of the CSPG, a position now held by Kathy Scales of the Class of '78. The Stanley Slipper Award for outstanding contributions to petroleum exploration is given in recognition of his role in the development of the Canadian oil industry.

The best known 1911 graduate was W.A. Bell, of St. Thomas, who went to Yale for his Ph.D., but joined the Royal Canadian Artillery before finishing. After the war, he finished his Ph.D., then went to the GSC, becoming Director in 1949. Other engineering graduates of 1911 include N.B. Davis of Kingston, David Nichols of Ottawa, James Stewart of Renfrew, and Lawrence Uglow of Kingston.

In all, the second decade of geology at Queen's appears to have produced 33 geologists, of whom 21 were engineers, 6 obtained M.A.'s, 5 B.A.'s and one was the first M.Sc. in engineering at Queen's.

W.A. Gorman
FLOOR PLANS FOR THE NEW GEOLOGICAL SCIENCES EARTH SYSTEM
INFORMATION CENTRE AND READING ROOM

LEGEND

1. Reading Room 4. Library and Stacks (survey publications)
2. Virtual Library 5. Map Cabinets

We are presently awaiting a detailed costing (in the vicinity of $150,000) of the above design for the new Information Centre and Reading Room and we hope to have construction begin in April or May of 1999. Financing of the project is still under discussion and we continue to welcome alumni contributions towards this project.

NEWS FROM THE DEPARTMENT

Virtual Fame for Geology Department’s Miller Museum

In November the Miller Museum’s World Wide Web exhibit “The Dawn of Animal Life” was chosen as one of the “10 Cool Science Sites” on the Internet by the Exploratorium in San Francisco. The Exploratorium is the world’s largest science centre hosting over 700,000 visitors per year. Each month they choose 10 sites to highlight on their Internet links page called “10 Cool Sites” found at: http://netra.exploratorium.edu/learning_studio/sciencesites.html.

The Dawn of Animal Life website (http://geol.queensu.ca/museum/exhibits/dawnex.html) was designed by curator Mark Badham, and is a summary of the permanent Miller Museum exhibit with the same name which is about early evolution in animals. Covering 2.5 billion years, the exhibit features extremely rare
Canadian rocks and fossils including the oldest known multi-celled animal fossils co-discovered in 1989 by Queen’s paleontologist Dr. Guy Narbonne and Dr. Hans Hofmann of the University of Montreal.

The Miller Museum of Geology, open to the public in Miller Hall from 9 a.m. to 5 p.m. on weekdays, has been offering hands-on educational programs in Earth Science to local school groups since 1989. For information, call the museum at (613) 545-6767.

Gerhard Pratt (Faculty) has been awarded $155,000 in matching funds by the Canada Foundation for Innovation (CFI), for the purchase of "Infrastructure for High Definition 3-D Seismic Processing, Imaging and Interpretation". The funds will be used to purchase computer software and hardware to complement the seismic data analysis facilities that were purchased by Gerhard Pratt on his arrival in January 1998. These expanded facilities will support a research programme on numerical modeling of exploration and earthquake seismic data. It is anticipated that this research will lead to improved seismic data processing methods, and to new inverse-modeling methods for high resolution imaging of geological structures. The CFI award will allow these objectives to be expanded to include work in conjunction with Colin Thomson (seismic modeling in complex 3-D, anisotropic media), Herb Helmstaedt (visualization of Lithoprobe data), John Dixon and Ray Price (3-D interpretation of seismic data from thrust and fold belts), and Bob Dalrymple (depositional history of environments).

Currently the research facilities include two Dec Alpha high performance numerical computing workstations, one Sun workstation licensed to run Promax (TM) (industry standard 2-D and 3-D Seismic processing system), and 36" colour plotting facilities. With the help of the CFI award these facilities will be expanded to include a second Sun workstation licensed to run Seisworks (TM) (an industry standard 2-D and 3-D Seismic interpretation system). More information can be found on Gerhard’s website (http://geol.queensu.ca/people/pratt).

Noel James (Faculty) has been at sea on the International Ocean Drilling Project vessel the "JOIDES Resolution" which is drilling a series of holes in the ocean floor off the coast of Australia in order to elucidate the formation of cool-water carbonate rocks. This is part of the research that is supported by his Killam Research Fellowship.

Guy Narbonne (Faculty) received "Honourable Mention" (runner-up to Best Paper Award) from the Paleontological Society for his paper "The youngest Ediacaran fossils from southern Africa" which was published in the November, 1997 issue of Journal of Paleontology. The award was presented at the Paleontological Society meeting during the annual meeting of the Geological Society of America in Toronto, in November. Precambrian fossils discovered by Guy in the Yukon in 1984 adorn the front cover of the latest Decade of North American Geology volume (C-1). He was an invited speaker at the Earth Systems Evolution Program workshop in Santa Cruz (December 3-5, 1998) where he spoke on "Glaciation and the Terminal Neoproterozoic Evolution of Life". The Santa Cruz workshop was sponsored by the Canadian Institute for Advanced Research, and focused on the processes that trigger climate change and the consequences of those changes on the Earth and on life.

Evsen Aydemir (M.Sc., 1998), a recent M.Sc. graduate supervised by John Dixon, has received the 1998 award for the best M.Sc. thesis in Structural Geology from the Structural Geology and Tectonics Division of the Geological Association of Canada. Her thesis research on "Investigation of Strain Related Displacement Transfer and Along-Strike Variation Using 3-D Seismic Interpretation, Physical Modeling, and Computer Graphics Visualization" was carried out as part of the Foothills Research Project, which is a collaborative effort involving John Dixon from Queen's and Don Lawton and Debbie Spratt from the University of Calgary, and is funded by NSERC and a consortium of about 25 oil industry firms.

Joanna Meldrum (M.Sc. 1997) won the second place award in the nation-wide Canadian Geotechnical Society Graduate Student Competition for a journal manuscript entitled: "Oxygen Consumption of Sulphidic Mine Tailings at Sub-zero Temperatures". The manuscript is based on her M.Sc. thesis which was co-supervised by Heather Jamieson and Larry Dyke of the GSC (formerly a Queen's faculty member).
GEOLOGY 107 - History of Life

This new first-year course, which is taught by Guy Narbonne, was introduced last year. The course is a free elective, and is not a required part of any program. Nevertheless, it was remarkably successful, so much so that the enrolment exceeded the seating capacity of Miller 105, and each lecture had to be delivered twice! Approximately half the students came from Biology or Life Sciences to obtain a geological perspective on evolution. The other half came from 30 different programs, including almost every department in the arts, sciences, and social sciences. The theme of the course is the inter-relationship between evolution and global change over the 4 1/2 billion year history of the Earth. This winter the course will be taught in the large lecture theatre in Sterling Hall, and enrolment is approaching the capacity of that room, which is 218 people.

Class of '83 Reunion

Fifteen years - how time flies. But the Class of '83 picked right up where they left off. On Friday night there was a BBQ and a slide show at Miller Hall where Peterson attempted to see what we remembered from Crystallography class. (Special thanks go to Pierre for providing many of the slides!). Saturday morning we tried to have a softball game, but most people were still sleeping (it off). Football game time was spent, by many, at the Portsmouth, and the remainder of the weekend was spent in various downtown establishments, it was tremendous fun. Thanks to Al Gorman (and any others he coerced into helping) for all the work done to allow us to use and abuse Miller Hall. See you in five years! Attendees: E. Ambrose (representing M. Hannington), A. Bowe, B.(&S.) Cumming, F. Diaz, J. Hughes, S. Lendrum, J. Lott, P. Maheux, W. Millar, J. Milne, P. Mouldey, J. Oliver, J. Polley, M. Rutka, P.(&A.) Sarjeant, J. Sidey, M. Thomas, R. Vernon, B. Wilson, Profs - B. Dalrymple, J. Dixon, E. Farrar, A. Gorman, H. Helmstaedt, G. Narbonne, R. Peterson, L. Smith. Also assorted groupies.
ACROSS

1. Cu, Fe S₃
12. Goes with meso and hypo
13. Metal in witherite
15. Conjunction.
16. Storage site for bad ones.
17. Read with a Brunton.
21. Give you a real blast.
22. Radioactive element.
23. What a volcano produces.
25. 2/3 of the United Empire Loyalists
26. Maker of Clark’s lift.
28. They called her frivolous.
29. Mountain lake.
31. A count.
32. Mountain hut.
34. May 8, 1945, what a day.
35. Separate ore from waste with a hammer.
37. Royal grenadiers.
38. Rocks made of rocks.
40. Neuter pronoun.
41. Boulders left behind.
42. Emergency room.
44. Give the kid a plug.
46. What a drill is when its ready to drill.
48. Location.
49. Adornment connected with Roche Moutonnée.
51. Cape Dutch language.
52. Metal combined with gold.
53. They carry molten rock.
58. Metal named after Copenhagen.
61. Not stream tin.
62. Equipment for drilling.
63. Hardest hardness.
64. In rutile.
65. Geochnon guru
67. Drowned river mouth.
68. In realgar.

DOWN

1. Under the drift.
2. Soothing stuff.
3. Rapid current.
4. Metal beam.
5. Old French for heel.
7. A game Charlie fell for.
8. Oil rich state.
9. Choose.
10. Prize for proficient profs.
11. Friendly agreement.
12. Rocks formed by addition.
14. What quartz is to granite.
15. Examinations on knowledge of celestial objects.
16. List of purchases.
35. Glacial pass.
36. Plead.
39. Ca₃F(PO₄)₂.
43. Refers to ocean environment.
45. Glacial ridges.
47. Biggest island in Society Group.
49. Manganese ore.
50. Narrow strait e.g., Canso
54. Shortened province.
55. To see in Paris.
56. Dead storage box transporter.
57. Concludes.
60. Common suffix.
62. Hurried.
ALUMNI UPDATES

1946
**Donald Yardley**, (B.Sc., Geol), B.Sc., Mining, Queens, '41, M.Sc., Geology, Queen's, '47, Ph.D., Minnesota, 1951, who became a Professor Emeritus at the University of Minnesota in 1984, was recently honoured with the Lifetime Achievement Award of the Minnesota Geotechnical Society.

1949
**Wm. Webb Cummings**, (B.Sc., Eng.), has retired after 40 years as exploration geologist, mine manager and engineer.

1954
**Ned Chown**, (B.Sc., Eng.), M.A.Sc., UBC, '57, Ph.D., Johns Hopkins, '63, has now retired from the Université de Québec à Chicoutimi, and is living in Kingston.

**Paul Karrow**, (B.Sc., Eng.), Ph.D., Illinois, '57, was co-author, with Owen White, of GAC Special Paper 42, entitled "Urban Geology of Canadian Cities".

**Barry Scott**, (M.Sc., Eng.), Ph.D., Imperial, is living in Gerrards Cross, Bucks, England, and is presently working in Turkey and Africa when not playing at bridge or local politics.

1959
**Jim Collins**, (B.Sc., Hon.), went on to obtain an MBA. He recently retired from the salt mines in Goderich. **Mike Chernoff**, (B.Sc., Eng.), captained the winning chuckwagon team at a CSPG golf tournament in Calgary in June, '98. Classmates may remember that Jean Royce didn't think that Mike's scholarship included the cost of his golf clubs.

1963
**D.Chris Findlay**, Ph.D., retired to Morrisburg after 30 years with the GSC. In 1996, he received an honorary degree from the Université de Québec.

**Carl Renzoni**, (B.Sc.,) is Senior Vice-President with Nesbitt Burns Mining Group in Toronto

**Roy Rupert**, (B.Sc., Eng.), M.Sc., McGill, '66, is with Borinfo Inc. of Sudbury, Ont.

1972
**S. George Pemberton**, (B.Sc., Hon.), Ph.D., McMaster, presently a professor at the University of Alberta, was the guest speaker at the December CSPG Luncheon in Calgary, where he related the presence of a *Glossifungitus* fauna to enhanced hydrocarbon migration.

1973

1979
**Dan Brisbin**, (B.Sc., Hon.), M.Sc., Queen's, '86, Ph.D., Queen's, '97, is Project Geologist with Cameco Gold Inc., in Sudbury.

1981
**Phil Walsh**, (B.Sc., Hon.), MBA, Western, is working on his Ph.D. in Management at the University of Bradford, UK. His E-mail address is prwalsh@canenerco.com

1982
**Tom Ebbern**, (B.Sc., Eng.), MBA, Western, is presently an analyst with Newcrest Capital Inc. in Calgary. His opinions on the future of the oil and gas industry were featured in a recent article in the Globe and Mail. **Neil & Gill Mathieson**, (M.Sc.), both earned their Ph.D.'s in 1987 at Sheffield. Neil is working for SAIC (UK) Ltd. in Aberdeen.

**Cynthia (Corbett) Visser**, (B.Sc, Hon.), M.Sc., Calgary, '85, reports that she is still riding the oil industry roller coaster.

1983
**Steve Coulter**, (B.Sc., Hon.), MBA, Queen's, 1990, is a Corporate Analyst with the Vancouver Stock Exchange, dealing mainly with oil and gas companies.

**Floyd Diaz**, (B.Sc., Hon.), who earned an EMBA in Houston, now lives in Burlington and works for AES Prodata North America.
Jennifer (Ellis) Eaton, (B.Sc., Hon.), now that both her boys are in school, can devote more time to her career as a contract geologist in Calgary.

Jane Hughes started with Salomon Brothers in New York after getting an MBA at INSSEAD in France, but was soon transferred to London where she still works as a trader in their derivative products group.

Lisa (Knowles) Moore, (B.Sc., Hon.), B.Sc., (Chemistry), is teaching Maths and Science in South Porcupine.

Sue Lendrum, (B.Sc., Eng.), M.Sc., McGill, is working out of the Head Office of Royal Oak Mines in Seattle, often with their environmental group.

Pierre Maheux, (B.Sc., Hon.), M.Sc., Alberta, '89, has come to rest, at least temporarily as a Senior Geoscientist with Jacques Whitford at their Ottawa office.

Wendy (Miller) Diaz, (B.Sc., Hon.), M.Sc., Memorial, '91, has worked as a hydrogeologist for Golder since 1989.

"J.P." Polley, (B.Sc., Hon.), B.Ed, Queen's, after a stint of teaching ESL in Japan, settled in Toronto working at a private ESL institute developing business ESL.

Marg Rutka, (B.Sc., Hon.), M.Sc., MacMaster, has been with the OGS since 1990, doing a lot of editing and touring the world in her spare time.

Paul Sargeant, (B.Sc., Hon.), spent 13 years touring the world for Echo Bay Mines before switching to Ulysses International in Denver, where he has recently been appointed President and CEO.

Janet Sidey, (B.Sc., Hon.), went back to school to take computer programing when career opportunities in geology were bleak, and has been working for Bell Canada for over 10 years. She is presently a Business/Systems Analyst with Bell in Ottawa.

Rick Vernon, (B.Sc., Hon.), MBA, USC, is working for Toronto Dominion in Toronto working on various facets of financing in the mining industry.

1985

Adrian Ruiter, (B.Sc., Hon.), his wife and two daughters are now living in Luanda, Angola, where he works for Chevron.

1990

Don Blyth, (B.Sc., Hon), MBA, Queen's, '93, is a Research Associate on the Global Mining and Metals Research Team of Deutsche Bank Securities in Toronto.

Keith Thomsen, (B.Sc., Hon.), B.Ed., Lakehead, '94, Informations Systems Diploma, Loyalist College, Belleville, has left the Ontario Ministry of Health in Kingston, and now works as a programmer for Revenue Canada in Ottawa.

1995

Elisabeth Siem, (B.Sc., Hon.), has been an exploration geologist with Statoil, the Norwegian State OilCompany, in Stavanger for two and a half years.
ALUMNI UPDATE

Would you please help us to create an accurate location and mailing list by completing this questionnaire:

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<tr>
<th>NAME:</th>
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Please use the space below (or an attached page) to add any news that we can pass on to other Queen’s Geological Sciences alumni?

Please reply to:

Dianne Hyde  
Departmental Assistant  
Dept. Geol. Sciences  
Queen's University  
Queen's University  
Tel: (613) 545-2596  
Fax: (613) 545-6592  
E-mail: hyde@geol.queensu.ca  
Kingston, ON  
K7L 3N6