

museological and classroom earth science education.

There are some very exciting educational programs and projects involving earth science museums and collections in this country, but this information is not readily available through the standard educational communications. The Board of Education for the Borough of North York, Toronto, Ontario, for example, is currently involved with a major experimental classroom project involving a paleontology collection. The Department of Geological Sciences, Queen's University, Kingston, Ontario, is currently redeveloping its departmental museum with an educational perspective that will involve both departmental and regional school involvement.

There are numerous museological examples and I am sure that others have information on exciting classroom programs that could be shared as well.

It is obvious today that there is a problem common to all aspects of geoscience education in Canada. It is simply one of effective communications among those who are actively involved. What appears to be needed is a resource centre network or a clearing house of geoscience education information and a commitment at either the national level or selected provincial levels to tie it all together. A co-ordinated voice does not exist for those involved in geoscience education in Canada; the classroom teachers, the museum educators and members of the profession at large with educational interests.

It is time to take the matter seriously, and it is time to start working together. The challenge is there and comments are welcomed on any of these ideas.

The possible remedies to the Canadian geoscience education problem are really only limited to our imagination and the commitments we as individuals make.

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Pyroclasts

Ward Neale

Up the Establishment

In our very first (un-named) column last November it was suggested that more geoscientists should be nominated for high ranking posts such as deputy minister, presidents, deans and so on. Since then several university people have pointed out to me that we are actually fairly well represented among the academic brass. Until Finn Campbell's recent resignation as V.P. at Calgary there were six academic mandarins, now there are five: Roger Blais at Polytechnique, Herb Armstrong at Guelph, John Mothersill at Lakehead, Con Gravenor at Windsor and Bob Uffen at Queens. Not bad I guess for a discipline that only numbers 10,000 members in its learned societies.

However, why not pick up a university calendar at random and see how other disciplines are faring? I happened to choose that of the University of Regina where the Vice President is a chemical engineer, the Dean of Graduate Studies a chemist, the Dean of Science a chemist and (get this!) the Dean of Arts is a chemist.

In the February issue a little piece called 'Help Stamp Out in-Groups' was designed to show either that there was no Canadian geoscience establishment or if there was then it was a harmless ephemeral thing. Strangely enough the article provoked letters from a couple of those mentioned, not because they had been named as part of the Establishment but because they were considered FORMER establishment. Documentation was provided to prove that they were still very busy people who had tight grips on the reins. Perhaps there is a Mafia in the Canadian georama after all. My investigation will resume immediately and I shall probably enlist the aid of Elmer MacKay, M.P.

Who Made Your Sandwich

Speaking of busy people, the busiest person I know is David Strangway (U. Of T.) who takes time out from meetings in Edmonton to jet off to Washington, D.C. and is back again so unobtrusively that you think he had just stepped outside for a haircut. He doesn't bore you to death telling you how busy he is because his wife Alice cured him of this long ago by asking him "who made your peanut butter sandwich" anytime that he complained of overwork. It stemmed from a conversation they both had with an acquaintance who was complaining of all the unpleasantness that he suffered: his poorly planned home, his lack of social life and his boring job. When he got around to complaining about his lunches and the fact that he had to eat his lunch at his desk for the past 25 years and it was always the same old thing, peanut butter sandwiches, Alice had to interject, "... But surely you can do something about that! Why not get your wife to make different kinds of sandwiches?" "No chance of that", came the despondent reply, "I have to make them myself".

Must say I stopped in mid bite when I heard that story and began to wonder about the spreading of my own peanut butter.

Research for Survival

On another track, Dave Strangway told several groups at the Edmonton GAC/MAC that he thought the recent SCITEC FORUM at Waterloo was the best thing of its kind that he had ever attended. It was entitled 'Shaping Our Future Now' and was directed chiefly towards the problems of Canada's manufacturing industry. The focus was on the need for changes in emphasis in industrial research and development so that Canada can make its contribution to world survival from a base of strength. Distinguished industrial scientists were among the guest speakers and also formed most of the participating audience of 140. Senator Lamontagne, the Hon. Bud Drury and a panel of 3 science-oriented M.P.'s fleshed out a program that produced some very provocative statements, e.g., "Canada is not going to achieve anticipated successes in high technology industry. We should be satisfied with our impressive achievements in small, knowledge-oriented industries (e.g.

geophysical research and instrumentation). The trend in the future will be towards useful applications of simple scientific principles to keep ourselves warm and fed." (Drury). "We shouldn't open a single new mine in this country unless we desperately need the product for our own use". (M. Saltzman, M.P.). "There is hardly any true risk capital available today in Canada, less than \$1 million for independent scientific innovation. However, government makes consumers provide risk capital for energy exploration which at the same time builds up the equity of individual oil company shareholders". (R. Grasley, financial consultant).

You can read all the details in the next SCITEC Bulletin available from Suite 202, 151 Slater Street, Ottawa, Ontario K1P 5H3. The forum was the first of three in a series entitled *Research for Survival* organized by Hugh Wynne-Edwards, SCITEC Vice President. The 1977 forum, entitled "The Critical Points" will emphasize energy, minerals, food and the environment as it pertains to Canada's and the World's future.

Other SCITEC initiatives taken at Waterloo: 1) A decision to proceed with the House of Science and Technology even though no government support is forthcoming; 2) *Organization* (by Frank Maine, M.P.) of a group which will bring parliamentarians and scientists together at regular intervals; and 3) Discussions with officers of the Science Council which may result in SCITEC finally emerging as the Canadian equivalent of AAAS or the British Association. If so let's hope for a merger of Science Forum and SCITEC to produce a first rate Canadian science magazine with a decent circulation.

First the World Then Canada

The Canadian Geoscience Council has recently taken on many of the country's responsibilities for international geoscience. It has become the national committee for IUGS and IGC represents us at ICSU, will monitor our progress with ICG and IGCP, etc., etc. There is only one man in the country who can keep all these initials and acronyms straight so W. W. "Hutch" Hutchison has been appointed Foreign Secretary of our Council and we blissfully trust the future to our shrewd, tough-talking, multi-lingual Coast Range Anthony Eden.

Meanwhile, back here on the farm Walter Kupsch of Saskatoon (an ex-Establishmentarian) has been appointed to the Science Council of Canada. Walter writes to advise us that this Council knows little of geoscientists and nothing at all of the Canadian Geoscience Council. We hope he will be able to keep them informed until the CGC gets around to making another obviously overdue appointment - a HOME SECRETARY!

Who Holds Up Half the Sky?

Women, that's who according to Barbara Mioduszuska, COMINCO's intrepid northern explorationist who replaced Norah Allman last year as chairperson of the GAC's Status of Women Geoscientists Committee. She may be right because although women presently make up only 500 of our 10,000 professional geoscientists they seem to be winning a large share of the awards. Helen Belyea of Calgary was recently made an Officer of the Order of Canada and Charlotte Keen of Dartmouth shared the APICS Young Scientist Award for 1975 with Fab Aumento. Incidentally, the APICS (Atlantic Province Council of Sciences) Award is open to all scientists from the three employment estates. So far four of the five awards have gone to geoscientists and the fifth to a biologist. Maybe there is a renaissance underway after all Editor Middleton!

Barbara further writes to state that her Committee has continued to be active since completion of Norah's GAC Report on The Status of Women Geoscientists. Beneficial dialogues are still taking place with reluctant employers, professional counsellors and others. The Committee continues to provide public information about women geoscientists. However, after the initial overwhelming response to the Committee's queries there are now fewer communications from the membership. Barbara wants to hear from you with your views on present progress and your ideas for future initiatives. Write her c/o G.A.C..

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