

Secretary's Report May 1990 – April 1991

INTRODUCTION

The Geological Association of Canada continues to provide members and the larger geoscientific community a wide range of geoscientific offerings through the publication of journals, a newsletter, special publications (special papers, the reprint series), the Annual Meeting, NUNA conferences, lecture tours and the programmes of the various Sections and Divisions. Although the financial situation of the Association deteriorated somewhat during the past year, the impact on these vital services has been minimized. The president has discussed several of these issues in his reports in *GEOLOG*. In keeping with the restraints placed on *Geoscience Canada* and *Geolog* the form of this report has been altered. More complete information on membership is available from Headquarters to any member who wishes to obtain it.

In conducting the Association's business, the Council met at Vancouver in May, in Toronto in October, in Wolfville, N.S. in February and will meet in Toronto in May at the Annual Meeting. Executive met at the same locations immediately preceding the Council meetings and also met in St. John's in September and in Drumheller in December. At the various meetings, routine business was conducted, but, more importantly, Council devoted considerable time to two major issues: (i) the provision of optional subscriptions to the *Canadian Journal of Earth Sciences* and the Association's publications, *Geolog* and *Geoscience Canada*, and (ii) the most efficient and effective method of operation for the Publications Committee and the general publications strategy best suited to the Association. The initial input for these discussions came from the deliberations of the Planning Committee supplemented by several separate studies commissioned by Council. Council's decisions on the publication's strategy are being implemented, the decision on an optional publications policy will be made after the returns from a questionnaire to members are received.

MEMBERSHIP

The membership rolls of the Association exhibited some fluctuation during the past year due, in part, to the severe economic climate prevalent in the mineral sector and in part to frustration expressed by members over rising fees and the impact of the GST. The following is a summary of the numbers of members in the various categories over the past three years based on the end of April data for each year:

Membership Category	April 1989	April 1990	April 1991
Honorary Fellows	2	2	2
Life Fellows	3	3	3
Retired Members	111	178	170
Fellows	1868	1897	1724
Associates	506	469	402
Student Associates	202	235	162
Undergraduate Associates	5	1	5
Corporate Members	37	34	22
Total	2734	2819	2490

The vast majority of these members reside in Canada with approximately 13% being from outside the country. In Canada, one-third of the membership is resident in Ontario, one-sixth in British Columbia and one-tenth in each of Alberta and Quebec.

During the past year, 61 new Fellows and 59 new Associate members have joined the Association; an additional 31 persons have transferred from Associate to Fellow.

The Council of the Association notes, with regret, the passing of the following members:

F.D. Gill M.J. Keen J. McAdam D.C. Miller K.C. Rose B.R. Rust

MEDALS AND AWARDS

One of the primary objectives of the Geological Association of Canada is to promote geoscience, and specifically to recognize outstanding contributions through the granting of medals and awards. The Association presented its most prestigious medals at a luncheon at the Annual Meeting in Toronto on May 27, 1991. The Logan Medal, the highest award of the Association, was presented to J. Ross MacKay of the University of British Columbia; the Past President's medal was presented to Frank Hawthorne of the University of Manitoba; the J. Willis Ambrose Medal to Christopher R. Barnes of the University of Victoria; and the Duncan R. Derry Medal (selected by the Mineral Deposits Division) to John Harvey of Noranda. The Elkanah Billings Medal (selected by the Paleontology Division) was awarded to Robert L. Carroll and a Special Service Award was made to the Newfoundland Department of Mines and Energy. Summaries of the citations for these medals and awards are given later in this report.

Logan Medal

The Logan Medal, the highest award of the Geological Association of Canada, is presented, usually annually, to an individual who has made outstanding contributions to geoscientific knowledge in Canada. In presenting the medal to D. Ross Mackay for his exemplary studies in the Canadian Arctic, the President, Dr. J.M. Franklin, cited Dr. Mackay's many contributions to our understanding of Arctic geomorphological processes in a scientific career spanning half a century and stressed that Dr. Mackay's dedication is an inspiration to all scientists.

Past President's Medal

The Past President's Medal is awarded to a geoscientist whose recent work in research, development or applications is judged to constitute an outstanding contribution in the field. Normally it will go to someone under 40 years of age. The Past President, Dr. D.J. Tempelman Kluit, in presenting the medal to Dr. F. Hawthorne, noted his outstanding contributions to our understanding of mineralogy and his multi-disciplinary and innovative studies.

J. Willis Ambrose Medal

This medal is awarded to an individual who has rendered sustained distinguished service to the earth sciences in Canada, through outstanding accomplishments in one or more of the following areas: education; research, management and administration; promotion; and institutional, professional or society affairs. In introducing the winner, Dr. C.R. Barnes, the Vice President, Dr. J.G. Malpas, cited the numerous contributions Dr. Barnes has made to the Geological Association of Canada in serving as secretary-treasurer and as president, his academic contributions at Waterloo, Memorial and Victoria, and his renown as an organizer in all numerous geoscientific councils in the country.

Billings Medal

The medal honours the contributions of Elkanah Billings to Canadian Paleontology and is awarded biennially for distinction in research and publication in the field. This year, the award was presented to Robert J. Carroll. In his citation, Dr. Mike Orchard, Chairman of the Paleontology Division, cited Dr. Carroll's contributions both as a researcher and as a teacher and particularly noted his meticulous publications and texts which are renowned for their attention to detail.

Duncan R. Derry Medal

This medal, recognizing the contributions of the late Duncan R. Derry, is presented annually for major contributions to the science of economic geology. The winner is chosen by the Mineral Deposits Division. This year, the award was presented by Mrs. Derry to John Harvey of Noranda. In introducing him, Ed Debicki, Chairman of the Mineral Deposits Division, cited the numerous contributions made to Canadian mineral exploration

throughout the two and one-half decades of his career. In particular, he mentioned John Harvey's innovative use of multi-disciplinary techniques which examined ensured the right techniques were used on a particular prospect.

Special Service Award

This award, rarely presented, is for extraordinary effort in geological or other work which has brought benefit to all members, distinction to the Association, and recognition to the geological sciences in Canada.

The Association chose this award to recognize the exemplary contribution of the Newfoundland Department of Mines and Energy. The citation inscribed on the certificate summarises the phenomenal support given by this government department, both corporately and through encouraging its personnel to participate in a wide range of geoscientific activities both of the GAC and other geoscientific societies. It has also supported many of its employees in positions of responsibility in these organizations in addition to contributing financially to the organizations.

HEADQUARTERS

The efficient operation of the Association depends primarily on the dedication of the Headquarters staff, Karen Johnston – Associate Secretary-Treasurer, Celeste Andrews – Publications and Advertising Manager and Arlene Power – Assistant Secretary. Assisting them on a part-time basis are Angela Barter and Perry Anderson.

The operation at Headquarters was re-organized in the summer of 1990, following the resignation of Yvonne Snow, the Publications Manager, to move to Toronto. She had also been responsible for the basic book-keeping. Karen Johnston has assumed that responsibility and we have installed an ACCPAC accounting system which also tracks our publications inventory. This necessitated the training of the Headquarters personnel on the system, but has removed the vagaries associated with the older, in-house system. Karen also is responsible for maintaining the membership records.

Arlene has assumed responsibility for the Council and Executive minutes and retains primary contact with membership through application processing and the general secretarial needs of the Association, including membership correspondence.

Celeste has taken on the Publications Manager's responsibility and combined this with her previous responsibility for advertising. The installation of the ACCPAC system in this area has eliminated some duplication of processing of invoices and provided time for advertising.

In summary, it has been a year of considerable change in the responsibilities of the staff and in the procedures for processing information. The effects of the changes are now becoming evident as we can track our financial situation better.

FINANCIAL REPORTS

1990 Audit

The 1990 audited financial statement was prepared by the Association's auditors, Doane Raymond, and delivered on April 23, 1991, following which it was distributed to members.

Total income from members' dues, interest on investments and corporate fees was \$284,784.

Expenditure on items other than Publications, *i.e.*, Headquarters operation related to membership affairs, was \$253,660 thereby providing a surplus of \$31,124.

The Publications operation, *i.e.*, Special Paper, Reprint Series and Short Course Note publication sales, provided an income of \$242,365 against expenditures of \$332,308 for a deficit on Publications of \$89,943.

Combining the two, Members Services and Publications, yields a net deficit of \$58,819 for the year 1990.

The major source of this deficit and the reason it was significantly larger than the \$19,000 forecast in the 1990 Budget was a failure to realize the projected sales for publications. A careful analysis of the rest of the financial statement reveals that other forecasts were within normal variances.

This means that, over the past several years, we have seen a surplus of \$47,697 in 1988, a deficit of \$47,587 in 1989 and a further deficit of \$58,819 in 1990. There has been, however, a significant increase in the value of our publication inventory which will produce revenue in subsequent years as it is sold.

Our retained surplus has decreased from \$184,951 at the end of 1989 to \$126,132 at the end of 1990 and is as low as we should wish to see it, representing approximately 20% of our annual cash flow.

1991 Budget

The financial situation of the Association caused the Executive to recommend a severe budget to the February Council meeting. Cuts have been made to all areas of the Association's operations in order to produce a projected balanced budget. Members will already be aware of the reduced size of each of *Geoscience Canada* and *Geolog*. The Publications income projection has been based on maintaining our present volume of sales, our Membership income is based on maintaining a static membership, but having increased revenue from the new fees approved at the May 1990 Council meeting. We have since faced an increase in the subscription cost per member for *CJES* with the GST also added to this. A further decision was made to provide all members with a copy of the *Program with Abstracts* for the Toronto meeting at an estimated cost of \$30,000.

The projected increase in Members Income reflects the increased fees for 1991. Publication Sales income is forecast to remain static even after accounting for the \$6 per volume handling charge added in mid-1990. Publication grants are decreased, re-

flecting the completion of volumes for which significant grants had been received.

Members services expenditures have been reduced by \$20,000, Publications Production charges are forecast to increase by \$18,000 and Publications Distribution expenses by \$9000, although this heading includes the Publications-Advertising Manager's full salary whereas, in previous years, the advertising was covered in the Members Services heading as a separate person was involved.

We are exercising extremely tight control over the expenditures side and our new inventory control and accounting system is providing us with more timely financial reports which should enable us to react rapidly as the year progresses.

The budget approved is a balanced one. Counteracting the deficits of the past few years, we have the inventory of books for sale that we have developed. Our publications have a cost value, reflecting their cost to us for producing them, of approximately \$210,000 and a selling value of almost \$600,000.

COMMITTEES

The general functioning of the Association in developing policy, admitting new members and supervising publications is all facilitated by volunteer committee members. Each standing committee has specific terms of reference and a chairperson. The size varies from committee to committee.

Perhaps the most onerous committee task, the chair of the **Publications Committee**, has been ably filled by Dr. Robert Baragar, who steps down in May 1991 from the position after three years. This committee is responsible for all publications, both directly for members, such as *Geolog* and *Geoscience Canada*, and the supervision of the whole production process for the publications for sale, including the editing, typesetting and printing. In addition, the Committee seeks and approves new volumes and assesses their place in the production stream. For his patient and careful attention to all aspects of this most crucial facet of the Association, we all owe a debt of gratitude, and our most sincere thanks, to Bob.

The major journal published by the Association, *Geoscience Canada*, is edited by Dr. Michael Cherry of the Ontario Geological Survey, currently seconded to the Geological Survey of Canada. He is assisted by Monica Easton as Managing Editor. Even with the restraints imposed by our budget, they continue to maintain the standards of *Geoscience Canada* in its four issues per year.

Our newsletter, *Geolog*, will be published three, possibly four, times this year, again in response to our financial situation. The volunteer editors, Michael and Monica Easton, continue to ensure that it is a lively and topical summary of the Association's ac-

tivities, which is eagerly anticipated by the membership.

During the reporting period, two Special Papers, #37 *The Early Proterozoic Trans Hudson Orogen in North America*, edited by J.F. Lewry and M.R. Stauffer, and #38 *Middle Proterozoic Laurentia-Baltica*, edited by C.F. Gower, T. Rivers and A.B. Ryan, were completed and offered for sale.

Council has approved funds toward completion in 1991 for Special Paper #39, *Evolution of the Western Interior Basin*, and for Landslide Hazards.

During the year, Geoscience Canada Reprint Series #4, *Diagenesis*, edited by I.A. McIlreath and D.W. Morrow, and #5 *Methods in Quaternary Ecology*, edited by B.G. Warner, were completed and offered for sale.

One addition for the Short Course Notes Series, #9, *Nonlinear Dynamics, Chaos and Fractals with Applications to Geological Systems*, edited by G.V. Middleton, will be released at the May 1991 meeting in Toronto. Another publication in this series, #8, *Theory and Application of Pearce Element Ratios to Geochemical Data Analysis*, edited by J.K. Russell and C.R. Stanley was released at the Vancouver meeting in May 1990.

The **Program Committee**, chaired by Emyln Koster is responsible for developing and overseeing all aspects of the GAC's technical program including Annual Meetings, NUNA Research Conferences and Field Conferences.

During the past year, the first two NUNA conferences were held at Invermere, B.C., and Val d'Or, Quebec. The organizers, Jim Aitken and François Robert, are congratulated for their superb efforts. Both were well attended and extremely successful. A third, on High Resolution Sequence Stratigraphy, has been organized by Dale Leckie and will be held during the summer of 1991 at Banff. The program committee would welcome suggestions for future conferences.

The 1990 Annual Meeting at Vancouver was a major scientific success, setting attendance records, and recording a reasonable profit. The 1991 meeting in Toronto has every indication of being a similar success, even in these hard economic times. The planning for the future Wolfville '92 and Edmonton '93 meetings is proceeding on schedule.

The **Education Committee**, chaired by Laing Ferguson, is responsible for administering the undergraduate prizes to geoscience departments in the country. This year, 30 winners were nominated from the 34 institutions contacted. Also this year, there were some changes in the procedures regarding student membership which should enable more institutions to nominate winners. The list of prize winners was published in *Geolog*.

The committee has begun compiling a list of audio-visual material available to students across the country. It is also determining the state of geological highway maps in various

provinces. In another endeavour, the committee has contacted other geoscience organizations to establish a network of geoscience education committees. A major initiative of the committee will be the special session, on Earth Science Education at all levels from Kindergarten to Continuing Education, being organized for the Wolfville '92 annual meeting.

The **Public Information Committee**, chaired by John Gartner has planned a luncheon speaker, Dr. Jeff Crellinon, to speak on Public Awareness of Science at a joint GAC and MAC Council lunch meeting at the Toronto '91 annual meeting. It has also developed contacts with the MAC's committee and our own Education Committee and has set itself the task of doing some strategic planning in the short term.

The **Membership Drive Committee**, chaired by Janet King, who steps down at the Toronto annual meeting, has been active in developing new membership application forms, in arranging for on-site membership, as an experiment at the Toronto meeting, and in distributing membership application forms to potential members.

The **Membership Review Committee**, chaired by Norman Halden, is responsible for processing all membership applications received by the Association. It has experienced no problems in its deliberations this past year, although the Chairman, in his report, to Council reminds us that the Association must define the benefits of membership as we will have to contend with the rising tide of professional registration of geoscientists across the country. He notes that many have considered FGAC as a professional designation. He also notes the blurring of the boundaries between geoscientists and others and suggests we may need to note this in our definition of associate membership.

The **Professional Affairs Committee**, chaired by Bill Pearson, has been monitoring the developments toward professional registration of geoscientists across the country and reporting to the membership *via Geolog*. It notes that registration is now in place in Alberta, the Northwest Territories, Newfoundland and British Columbia. Active discussions are continuing in Ontario, Saskatchewan and Manitoba, a major development has occurred in Quebec, and discussions are at early stages in Nova Scotia and New Brunswick.

The **Planning Committee**, chaired by Mary Clare Ward, is responsible for long-range planning and discussion of topics that will impact on the success of the Association. During the past year, it contributed to the establishment of the Nowlan Committee, which examined publishing options. It also designed, and is administering, a questionnaire seeking members' opinions about subscriptions to journals as part of membership dues. It will be organizing discussions at future meetings on enrollments in geo-

sciences, the impact of professional registration on GAC, the role of sections and divisions and the fostering of communications between them and headquarters and Council. There will also be discussions about our relationship with other geoscience societies.

The **Finance Committee**, chaired by Gordon West, who stepped down at the Toronto meeting, is responsible for advising on the investment strategy for the association and monitoring the financial state. It advises on the setting of membership dues and assesses the budget prior to submitting it to Council.

The **Howard Street Robinson Fund Committee**, chaired by Hugh Squair, administers the Robinson Fund which supports lectures and publications related to Precambrian and mineral related geology. During the past year, it supported a lecture tour by Dr. John Percival and approved a grant of \$7,000 seed money to a publication on mineral deposits modelling.

DIVISIONS

The Association has nine divisions enabling members to maintain contact with others having similar interests. These sections are active in organizing symposia and special sessions at annual meetings, lecture tours by speakers, undertaking publications and distributing newsletters to their members. Several also present awards to persons who have made outstanding contributions in their fields.

Canadian Sedimentary Research Group. The Group's Ontario-Quebec meeting, this year scheduled for May 13-15, was cancelled due to its proximity to the Toronto annual meeting. The Western meeting, convened by Bill Arnott, is scheduled for May 15-17 in Calgary. The Central Region Field trip was held in October, 1990 to examine rocks of the Grenville near Bancroft. It has sponsored one symposium and two special sessions at Toronto and has one symposium and one special session planned for Wolfville '92.

Environmental Earth Sciences. The division reports that, during the year, it has a growing membership and is actively promoting environmental earth sciences. It has had its revised constitution approved by Council. This enables it to have representation from various regions of the country. Two special sessions for the Toronto meeting, on Urban Geology and Groundwater in Human Societies, were well supported; an special session, on Transport and Fate of Contaminants, is being organized for Wolfville '92. The division has organized its own education committee and has developed links with the Public Awareness Committee of GAC. A newsletter was mailed to EES members three times during the year.

Geophysics. The division conducts most of its activities through the Canadian

Geophysical Union which held its annual meeting for 1990 in Saskatoon and is holding its 1991 meeting, May 8-10, in Banff. The Geophysics division is sponsoring a short course at the Wolfville '92 meeting.

Marine Geosciences. During the year, the division, and indeed all of GAC, was saddened by the sudden death of Mike Keen, a founding member, and ardent supporter, of the division. Plans are being developed for a suitable memorial to him from the division. A session, on Marine Minerals, was sponsored at the Toronto '91 meeting.

Mineral Deposits. This division is the largest in GAC and is in a very healthy financial position with a membership of more than 850. The division presents several awards of its own, in addition to selecting the winner of the Derry Medal presented by the Association as a whole. This year, the William Harvey Gross Medal was presented at the MDD luncheon to Derek Wilton of Memorial University. The Julian Boldy Certificate for the best paper at an MDD-sponsored session at Toronto '91 has been awarded to T.J. Barrett and S. Cattalani for their paper, entitled "Lithostratigraphy and alteration using immobile elements: The Ansil and Aldermac VMS deposits, Noranda, Quebec". Four editions of the newsletter have been published this past year; a new feature on case histories of specific new deposits has been well received. On the publications side, the expanded abstracts from the NUNA Research Conference "Greenstone Gold and Crustal Evolution", held in Val d'Or last year, have been released for sale at the Toronto meeting and sold rapidly. Funding is being allocated toward the publication of the IAGOD Mineral Deposit Modelling session papers. Two additional publications are being considered. Three special sessions are planned for the Toronto '91 meeting, and there are plans to videotape the MDD sponsored sessions for sale. This approach was successfully piloted at Vancouver.

Paleontology. The division is in good financial shape and has an active membership of more than 140. It is hoping to adopt a logo at the Toronto meeting. During the year, it sponsored the Canadian Paleontology and Biostratigraphy seminar at Kingston in September and sponsored a symposium at the Toronto '91 meeting. In future, the special seminar will be known as the Canadian Paleontology Conference, the inaugural meeting will be held in conjunction with the Pander Society in Vancouver in August 1991. An agreement has been reached to have the CPC Program with Abstracts and the CPC Field Trip Guidebook published and distributed through GAC; a new contribution to the *Palaeontographica Canadiana*, was released, #7 *Ichnology of the Upper Cambrian(?) to Lower Ordovician Bell Island and Wabana Groups of Eastern Newfoundland* by D. Fillion and R. Pickerill. Additional volumes in the series are being planned. On the edu-

cational and public awareness fronts, the division notes the release of four stamps in the fossil series and the distribution of a fossil poster produced by the GSC Calgary.

Precambrian. The division notes the Robinson lecturer for 1990 was John Percival who visited 26 cities across the country and presented his address, entitled "Archean evolution from three-dimensional crustal exposures of the Superior Province". A special session, on Precambrian Sedimentation, has been sponsored at the Toronto '91 meeting.

Structural Geology and Tectonics.

The division, which has seen a healthy increase in membership, held two meetings in 1990-91, one a workshop in Nova Scotia and one at the Toronto annual meeting. The annual Best Paper Award was presented to P.F. Williams and G.D. Price for their paper, entitled "Origin of kinkbands and shear-band cleavage in shear zones", which appeared in the *Journal of Structural Geology*. Margaret E. Coleman of Carleton University was awarded the prize for best graduate thesis for her M.Sc. thesis, entitled "Eocene dextral strike-slip and extensional faulting in the Bridge River terrane, southwest British Columbia". Her supervisor was Randy Parrish. The division also sponsored a Cordilleran workshop in Calgary in February, 1990, and has plans for another at the Wolfville '92 meeting. During the Toronto annual meeting, it sponsored three special sessions. The division has become a supporting member of the newly formed International Association of Structural and Tectonic Geologists.

Volcanology. The division sponsored the popular Mount St. Helens special session at Vancouver '90 and is sponsoring a special session at Toronto '91. Two editions of the newsletter were distributed. Seven M.Sc. theses were received for consideration for the Leopold Gelinas award, which was presented to Barry Cameron of Dalhousie University and Angela Kolisnik of Queen's University at the Toronto '91 meeting.

SECTIONS

Cordilleran. Membership in the section has dropped in part due to the economic climate. The publication *Vancouver Geology*, published in May 1990, has been well received and is selling well, as are other Section publications and guide books from the Vancouver '90 meeting. Five lectures were held this year and one short course was co-sponsored.

Edmonton. The section reports another busy year with monthly luncheon speakers, an annual field trip and a well-attended Pub Night. Its financial statement shows a healthy balance and the members are in the preparation stages for Edmonton '93.

Newfoundland. The ritual Lobster Boil started the year's activities for the Newfoundland Section in May 1990, followed by the Logan Day celebration in September as

part of the official opening of the new Alexander Murray Building at Memorial housing the Centre for Earth Resources Research and the Department of Earth Sciences. The fall field trip was well attended as usual. The section has decided to increase its commitment to scholarships. The Annual spring meeting concentrated on environmental studies. Funding was received from the St. John's '88 trust fund for conducting a workshop for high school teachers in one area of the province, the section is examining ways to expand these. The newsletter continues to apprise geoscientists of the local events. The section ended the year in good financial shape.

Pacific. The section had another active year beginning with the annual Dawson Day picnic in June and ending with the annual symposium in April, for which the theme was "The geology of the Canadian Cordillera - A look into the past". The programme included papers on the mining and petroleum exploration history of the area, and a survey of the evolution of geological thinking about the Cordillera. The fall field trip was to the Olympic Mountains. During the year, monthly luncheon meetings were held and a major public information series tied to the international project on natural hazards was organized in which three public lectures on Earthquakes, Landslides and Volcanoes were held. The public response to these was phenomenal, with over five hundred people attending two of them. On Earth Day, members of the section organized some activities at a local school in Sydney which was well received by the students. The section has also received a grant from the British Columbia government to develop a series of displays for provincial parks near old mining sites.

Winnipeg. An active speaker's schedule and an annual field trip again highlighted the section's activities for the past year. It also included some co-operation, on speakers, between the local section and the CIMM Winnipeg branch.

Respectfully submitted,

Hugh G. Miller
Secretary-Treasurer

St. John's, Newfoundland
July 1991