

Schreiber Channel Provincial Nature Reserve will be managed to protect its significant geological features and to maintain the natural integrity of the outcrop. In the past, the relative inaccessibility of this site has not prevented amateur and professional collectors from removing rock and microfossil samples. This collecting, coupled with the limited size of the outcrop, has endangered this valuable exposure. In future, indiscriminate collecting will be prohibited. However, collecting for viable scientific research will be permitted. A collecting policy for the Nature Reserve will be established by way of a Master or Management Plan.

The Master Plan also will determine the need for and location of access points, interpretive displays, signs and trails. A low key interpretive programme will link Schreiber Channel Provincial Nature Reserve to the Nature Reserve zone in Kakabeka Falls Provincial Park. The interpretive programme will stress the need to protect the significant outcrops and will help to inform the public about conditions during the Precambrian. The emphasis of the interpretive programme will be placed at Kakabeka Falls thereby minimizing the use and potential destruction of the Schreiber Channel site.

### Summary

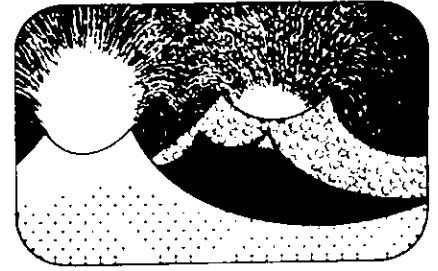
Ontario's Provincial Park system plays an active role in protecting natural features. This protection is achieved in part through Provincial Nature Reserves and Nature Reserve zones. Such parklands are selected to represent the distinctive landforms and natural habitats of the Province.

Schreiber Channel Provincial Nature Reserve and a Nature Reserve zone at Kakabeka Falls Provincial Park were established to protect two highly significant Precambrian bedrock and fossil sites. These sites will be protected and managed for outdoor education and scientific research.

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## Pyroclasts

Ward Neale

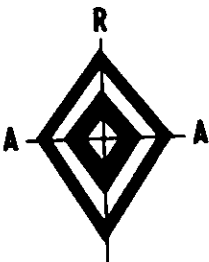
### Another Lady-Like Step Forward

Norah (Neen) Allman's recent election as Vice-President of the Geological Association of Canada will delight many and surprise few or none. It was the logical next step up the ladder for a vivacious active person who has been increasingly prominent in the affairs of geoscience for the past five years. Also, recently, we have become accustomed to names such as Pauline Moyd, Sharon Bachinski, Barbara Mioduszezowska and Charlotte Keen appearing on mastheads, councils and important committees. Hard to believe that less than a decade ago our few prominent women were only allowed to be seen, not heard (although Madeleine Fritz did break through the sound barrier on occasion!). Then followed the days when Neen Allman was maintaining that women had the right to go underground on geological field excursions. And remember Judy Moody who had the affrontry to state that the alleged inability to lift oil drums was merely a red-herring used by chauvinists to bar women from employment in field geology? We seem to have come a long way quickly and quietly. Where will this insidious infiltration bring us?

### Towards a Complete Sex Change?

Men still greatly outnumber women as students in our geology and geophysics departments. Possibly this is because there are so few female professors to act as beacons, only 8 out of a total of 465 faculty members in the geosciences. The undergraduate male:female ratio is changing fast, however, and both New Brunswick and Queen's reported that geology enrolments in their B.Sc. programs included 40 per cent women last year. Queen's additionally noted that their rigorous engineering geology option attracts 25 per cent women.

The dramatic changes will stem not from enrolment but from type of employment according to Leslie Chorlton, field geologist with the Newfound-



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land Department of Mines and Energy. Leslie, who a few years ago was the first woman to lead an Ontario Department of Mines' field party, claims that the oil industry will bring about the sex change in geology. Many months before graduation the opulent oil companies are competitively bidding against each other for all the warm male bodies in geology and geophysics departments. Typically conservative, they make few offers to women students who are left unhired until the later recruiting by geological surveys and mineral exploration companies. The unfortunate males are whisked off to Calgary where they learn how to fill in expense accounts, to apply for short courses on reservoir geostatistics, and to present slick interpretations of geophysical data in the wall-to-wall luxury of downtown boardrooms. They never see rocks again except on educational T.V. In contrast, women have to traverse across deserts and mountains, packing through snow, sun and sleet to collect rocks, make maps and find mineral deposits. All good stuff, for a geologist is only as good as the number of outcrops she has examined. Leslie maintains that, within a few more years, women will be the only people under 50 who qualify as geologists. The take-over will be complete and if there are any oil drums still around (highly doubtful!) women will be the geologists loading and unloading them at field camps.

#### **The Isolation of Petroleum Geoscience**

As readers know, I abhor generalizations but it is fair to state that the average geologist or geophysicist in Calgary knows and cares less about what is happening in geoscience elsewhere in Canada than does his counterpart in St. John's, Thunder Bay or Salt Spring Island. Most scientists keep abreast of their fields through the meetings and publications of scientific societies. These periodically bring them into contact with the work and thoughts of those in other disciplines and in other forms of employment.

Petroleum geoscientists are more self-contained than others in their society activities. Their three major societies (CSPG, CSEG and CWLS) confine most activities to the Calgary area and relatively few of that city's enormous population of geologists, geophysicists and well-loggers belong to or attend meetings of societies beyond the city limits. Also, remarkably few professors and government scientists from the hinterlands (Toronto, Fredericton and Peggy's Cove) attend the annual meetings and symposia in Calgary. Petroleum geoscientists only learn of the great beyond

by combining fact-finding missions with their annual recruiting tours - but this involves only a few people and only a few universities apart from those in the western provinces.

It is a great pity because geoscientists in other parts of the country could learn a great deal through occasional formal and informal exchanges with petroleum geoscientists. And vice-versa!

Part of the remedy lies with our geoscience societies.

#### **Our Peculiar Societies**

Nothing queer about them, mind you! They are all useful, flourishing and enviably coordinated through the Geoscience Council. But we do have a lot of them, eleven national geoscience societies, and most of them are quite specialized. Most countries started out with general geological societies (such as GSA or the U.K. Geological Society) which later spawned specialist societies. Not Canada. We started with groups such as CIM, founded in 1898, and CSPG, which is over 50 years old. Our first general geological society (GAC) only came into being 30 years ago, long after strong speciality allegiances had been established. The GAC struggled valiantly to survive until the late 1960s when innovative programs and good management gave it a firm foothold. Nonetheless, it has never attracted more than a bare 20 per cent of the geoscience population as members. The membership includes most academics, many government scientists and a surprisingly large number from the mineral industry. In fact, mineral explorationists and consultants outnumber academics and government scientists combined. The oil industry is poorly represented, only about seven per cent of total membership. The mineral deposits division of GAC is the largest and fastest growing unit within it. There are no divisions (such as sedimentology) of specific interest to the oil industry.

In contrast, for historical reasons, U.K. petroleum geologists for many years have played leading roles in the Geological Society and have presented many of their classic papers for discussion by audiences of academic and survey scientists at Burlington House, London. In the U.S., many have memberships in both the old established GSA and the newer, more specialized AAPG. It is notable that the largest single category of major scientific interest of the GSA members is petroleum geology (GSA News and Information, March, 1980).

It is unlikely, however, that these facts will goad a few thousand tradition-conscious Calgary geoscientists to apply

for membership in such a new and untried organization as the GAC.

#### **The Answer - Low Level Homogenization**

Cooperation between societies is required, preferably at the lowest levels of organization, the sections and divisions.

Executives of the Calgary-based petroleum societies certainly have made efforts to inform those in the outposts of their activities and also to interest their own members in people and science beyond the oil patch. They offer prizes and field trips to students across the country, write about themselves in *Geolog* and organize joint symposia at annual meetings of GAC-MAC.

The needed interaction won't come at large, unwieldy joint annual meetings of whole societies. Rather, it will evolve from the small, intimate meetings where one learns things about one's favourite rocks, about the people who are working on them and even something about the meeting place itself. The Calgary societies or their subject divisions should attempt to stage joint meetings with GAC regional sections and with local independent groups such as the Atlantic Geoscience Society or the Saskatchewan Geological Society. Topics of common interest should be easy to find, e.g., permeability studies should be of equal interest to CSPG reservoir geologists and to hydrogeologists of the GAC's Environmental Earth Science Division. In other cases, teach-in approaches might be welcome, e.g., the Toronto Geological Discussion Group or the Newfoundland GAC Section might welcome the opportunity to find out how CWLS petrophysicists earn their livings.

Regardless of topics, such joint regional meetings should be held on university campuses and should include tours of the local provincial survey facilities. Having started at the (wrong?) end of the line with highly specialized groups, it would serve us well to return to the beginnings and to find out why our distant colleagues are doing the seemingly irrelevant things that they are doing. It will certainly be interesting and it could prove useful.

#### **Halifax '80**

It was a magnificent GAC/MAC meeting and a great credit to the host organization, the Atlantic Geoscience Society. Technical sessions covered every part of Canada and touched on all the subdisciplines in which Canadian geoscientists excel - with the usual healthy concentration on mineral deposits. Field trips covered all the highlights of Appalachian geology from Quebec to St. John's in

typical maritime sunshine. Social activities and entertainment had that special Atlantic Flavour and the welcoming party (with free booze), the annual luncheon with a warm message from a genuine town crier and the joyous lobster supper were memorable events where you could meet almost everyone you ever knew.

A meeting such as this strengthens the conviction that GAC/MAC must never again dilute annual meetings by sharing them with other large organizations from at home and abroad as was done at Montreal, Waterloo, Vancouver and Toronto. There is no harm in volunteering to stage an annual meeting for GSA, IGC or AIME but let us not allow it to wipe out our distinctive GAC/MAC annual meetings any more than the Atlantic Geoscience Society would allow this meeting to usurp its own annual event.

#### Poor Slides - A Solution at Last

Talks at Halifax '80 were better than average but there were as many grotty, unreadable slides as usual. Along with dozens of other commentators and most organizing committees, I have continually cited the good examples to follow: the AAPG guide; Peter Wiley's or Roger Walker's simple, amusing and explicit diagrams; or any GSC author's colorful and slick presentations - but it is all to no avail. The consistently worst offenders are academics, some of whom combine unreadable slides with the unorganized and incomprehensible lectures many of us remember from college days long ago.

And now the solution. Starting with the 1981 Calgary meeting, the main duty of session chairmen will be to identify the most poorly illustrated paper given in each session and to announce the name of the culprit to the audience. At the final wind-up evening the names of all offenders will be read out, samples of their slides flashed on the screen and the poorest identified by audience reaction. The fate of the supreme loser could be left to the local committee - at Calgary's buffalo barbeque possibly he could be buried by bones flung by the irate crowd. It seems cruel but remember the misery such people have inflicted for so long on so many. Remember also that the worst are apparently incurable.

#### Congratulations To:

- *Glen Caldwell* of Saskatoon who assumes the presidency of GAC after many years of service to the Association, beginning in 1973 when he was chief organizer of the memorable annual meeting in Saskatoon. As chairman of the editorial committee for many years, Glen has enhanced the scholarly reputation of GAC by insisting on quality in all our publications from weighty tomes on metallogeny to breezy newsletters.
- *Dick Alcock* of Inco who assumed the presidency of MAC and now has to match banquet barbs with Joe Mandarino, Syd Lumbers and other unpredictable mineralogical wits.
- *Jon Bujak, Howard Donohue* and their colleagues from the Atlantic Geoscience Society who produced the excellent Geological Highway Map of Nova Scotia in time for GAC/MAC meeting. Don't visit Nova Scotia without a copy in your packsack.
- *The Mineral Deposits Section* for naming their newly minted medal in honour of *Duncan R. Derry*, dean of Canada's mineral deposits geologists and twice past president of our Association.
- And to *Tony Naldrett*, first winner of the Duncan Derry Medal, for a nice tribute to Duncan in his written acceptance of the Medal.
- *Hans Hoffman* who capped this year's Billings Medal for his long and fruitful studies of those funny little trails and "tricks of nature" that are found in Precambrian rocks.

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