

Minerals Update

Department of Natural Resources, Minerals and Energy Branch

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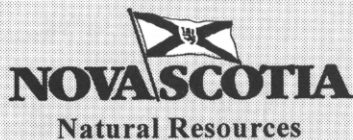
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PDAC Declares Crisis in Canadian Mining Industry

In a late addition to the program of the recent Mining Matters 1999 conference in Halifax, delegates heard a riveting presentation on the state of the Canadian exploration industry by Dave Comba, Director of Issues Management for the Prospectors and Developers Association of Canada (PDAC). Mr. Comba presented the results of an investigation by the PDAC into the exploration strategies of major Canadian mining companies, and the implications of these strategies for junior exploration companies and prospectors. He then outlined the PDAC's plans to address what it has termed a crisis in exploration funding.

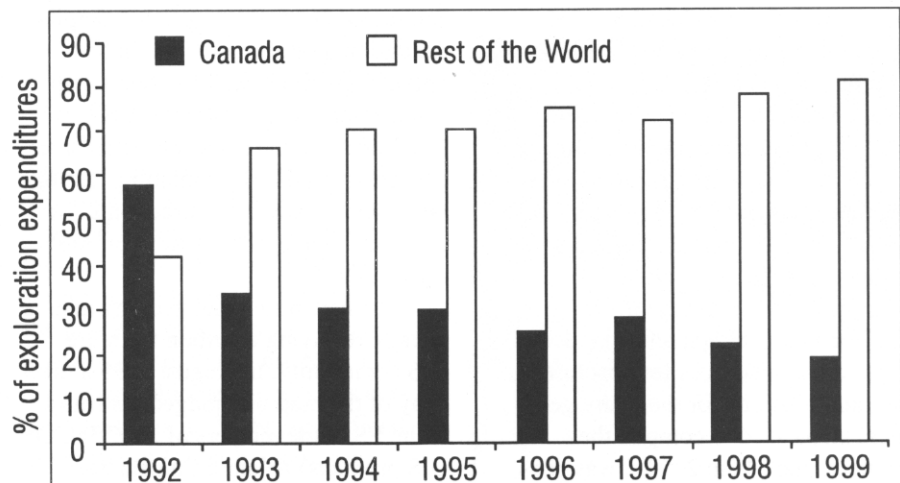
What factors have led the PDAC to declare a crisis in the Canadian mining industry?

(1) Canadian exploration levels are severely depressed. There is a current down cycle in metal prices,

perception of the junior market is negative and currently overwhelmed by the 'dot.com' phenomenon where high-risk investor interest is focused on internet stocks, and there is increasing global competition for exploration funds, raised principally on Canadian exchanges.

(2) Major mineral-producing companies are spending more of their exploration dollars offshore. Prior to 1993, Canada's top senior companies were spending approximately 60% of their exploration budget in Canada and 40% offshore. By 1999 this ratio had changed to 20% domestic and 80% offshore (see graph below). A PDAC survey revealed that many major companies are interested in buying deposits in Canada once found, but are not interested in grass-roots exploration.

(3) There has been a collapse of financial markets for the junior exploration sector. The number of junior financings



Canada's top senior mining companies' exploration expenditures in Canada vs. offshore, 1992-1999.

(Continued from page 1)

has dropped in recent years by 33% from 120 per month to 80. Perhaps more importantly, the average financing has dropped from \$2.5 million per financing to \$0.5 million. In 1996, junior mining companies raised approximately \$5 billion on Canadian markets; the projected number for 1999 is approximately \$0.25 billion. The net effect is that many juniors are technically insolvent and lack the funds to mount effective field programs.

This crisis in mineral exploration levels is placing at risk a long-standing Canadian infrastructure, such as drilling contractors, helicopter companies, professional geologists, geophysicists and engineers, hotel services and outfitters. This will have an overall effect of eroding Canada's competitive edge and weakening our pre-eminent position in the global mining industry.

What action does the PDAC propose to address the crisis?

The PDAC is proposing a new, time-limited "Focused Flow-through Share Program" to governments across

Canada in order to stimulate high-risk investment in domestic mineral exploration. This new program is based on the Mineral Exploration Depletion Allowance (MEDA) program that operated from 1983 through 1987. This earlier program was also designed to stimulate mineral exploration, and had the following impacts: (1) Exploration expenditures in Canada reached record levels (> \$40 million in Nova Scotia in 1987 and 1988). (2) Major new discoveries were made, leading to the opening of several new mines (Louvicourt, Lindsley, Eskay Creek). (3) Groundwork was completed for Canada's first diamond mines (Ekati, Diavik). (4) There was a significant increase in the national inventory of mineral occurrences and deposits. Some of these will lead to new mines in the future, or will stimulate more exploration that may lead to the discovery of new deposits nearby.

While the MEDA program generated these success stories, it was widely criticized for technical problems with implementation and management.

The PDAC has corrected these shortcomings in its proposed Focused Flow-through Share Program, which it thinks will energize Canada's junior mining sector, create jobs (especially in rural and northern Canada), preserve Canada's domestic infrastructure (including roads and railways), and restore its competitive advantage in the global mining sector.

Mr. Comba's presentation in Halifax was one of a series being made by PDAC senior executives to the 'Open House' conferences held annually by Canada's provincial and territorial geological surveys. These presentations are part of PDAC's strategy to raise awareness of this serious funding crisis and to solicit letters and calls to federal Members of Parliament from local mining groups and individuals in support of their proposal.

If you would like more information about the current flow-through proposal, or about how you can contribute to the initiative, please contact the PDAC by telephone at (416)-362-1969 or by facsimile at (416)-362-0101.

Mike MacDonald and Dave Comba

New Geological Map of Nova Scotia

The 1:500 000 scale Geological Map of the Province of Nova Scotia is the most popular geoscience publication of DNR's Minerals and Energy Branch. A full-colour, 1:500 000 scale map of the province was first produced in 1965, and was extensively revised in 1979. The provincial geology map has been further revised on the basis of geoscience studies carried out over the last 20 years and the branch is proud to release the new compilation map as DNR Map ME 2000-1. January 26 will be the official release date.

Enhancements in the new map include updated geology, an expanded legend, a list of sources for absolute age dates, and citations for the many geological maps used to compile the provincial map. Map 2000-1 was produced using digital cartography and

GIS technology. The map will be printed within the department, and will also be available to users in digital form suitable for GIS systems.

The Geological Survey of Canada contracted Dr. J. D. Keppie to compile the digital map data in 1994, in cooperation with DNR. The digital map manuscript was submitted to DNR in 1996, and was the subject of extensive peer review, editing, formatting, cartography and database construction to become the final product ready for publication this month.

The new provincial geology map is already receiving attention from the GIS community. In August 1999 a draft copy of the map was judged best map at the ESRI (developers of ARC/INFO® GIS products) Atlantic Canada users group meeting. This recognition gives

the map an entry into ESRI's international map competition in San Diego this summer. ESRI also selected the map as the December graphic for their 2000 calendar.

The new Geological Map of the Province of Nova Scotia is an excellent example of the advances in map production and publication using digital cartography and GIS technology. It further demonstrates the value of scientific cooperation between DNR and the Geological Survey of Canada, as both agencies work together to address the geoscience needs of Nova Scotia. This map, and its future revised versions, will undoubtedly become the most frequently used reference on the geology of Nova Scotia for the new millennium.

Bob Boehner and Brian Fisher

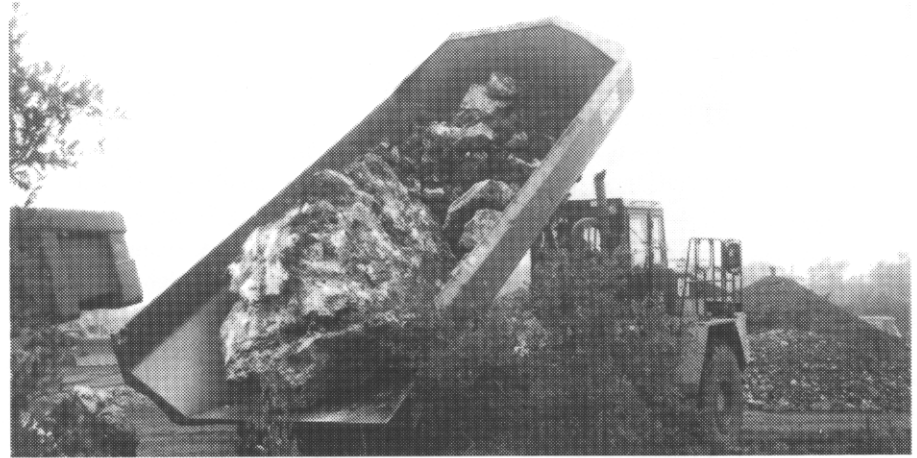
Mineral Promotion Activities for Winter 2000

The Department of Natural Resources (DNR) places a high priority on promoting the mineral resources of Nova Scotia. Several promotional activities designed for the exploration industry have been undertaken recently and more are planned for early in 2000.

In November 1999, DNR hosted a Zinc Workshop as part of **Mining Matters '99** (see article p. 7). The workshop provided an excellent forum for discussing the potential for new mineral deposits in Nova Scotia.

DNR will have a promotional booth at the B. C. & Yukon Chamber of Mines **Cordilleran Exploration Roundup 2000** in Vancouver (Jan. 25-28) and the Prospectors and Developers Association of Canada **Mining Millennium 2000** in Toronto (March 5-10). The purpose of attending these events is to promote exploration and development opportunities currently available in Nova Scotia to national and international mining executives. Displays for these conferences will feature: (1) mineral exploration, development and production highlights; (2) a summary of the major base metal and precious metal environments in the province with specific attention to Carboniferous and Precambrian deposits; (3) an example of the excellent digital databases currently available through DNR's public access GIS; and (4) a summary of Nova Scotia's advantages for mineral exploration and development.

Another part of the department's promotional program is direct assistance to prospectors and explorationists for marketing their properties. This year, three major initiatives are underway. (1) The annual publication *Properties for Option in Nova Scotia*, featuring submissions from prospectors and explorationists, provides a concise overview of mineral properties currently available for option agreements. The publication is distributed through the DNR Library (902-424-8633) and at the trade shows. (2) Travel assistance



A 35 t articulated truck delivers a load of barite from the pit at Lynx Minerals Inc.'s mine in Scotsville. The barite mine opened in the summer of 1999 and is an example of the strong potential for new mineral developments in Nova Scotia.

funds are provided to send prospectors and explorationists to trade shows as part of the Prospector Assistance Program. This year arrangements are being made to send four people to the **Cordilleran Exploration Roundup** and eight to **Mining Millennium 2000**. (3) As in past years, DNR will play the lead role for Nova Scotia in organizing and funding the provincial component of the Atlantic Canada Rock Room at the PDAC convention. This year the Rock Room will

feature a DNR booth and eight prospector displays.

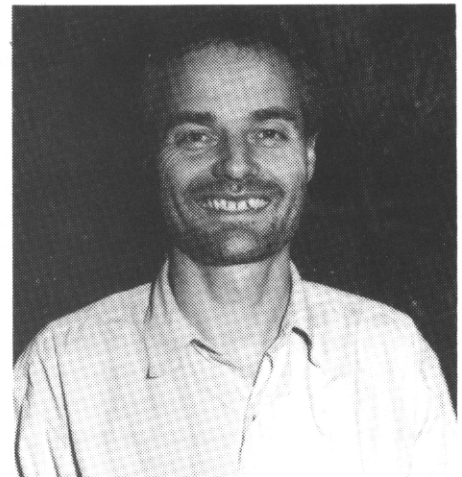
Nova Scotia has a rich heritage of industrial mineral, fuel, base metal and precious metal mining with strong potential for future mineral development. DNR is actively promoting this mineral potential and continues to explore new and innovative promotional activities. Remember.... We're Worth Exploring!

Mike MacDonald

Geochemist Terry Goodwin Joins the Minerals and Energy Branch

On September 13, 1999, Terry Goodwin joined the Mineral and Energy Resources Division as Project Geochemist. Terry brings 20 years of experience as a geologist and geochemist with companies including Asarco, Shell, Bluestack Resources and Noranda. Prior to his current position he worked as geochemist for Westminer Canada (WMC International) for the past six years. Terry is a graduate of Acadia University and the N. S. College of Geographic Sciences. He is currently completing an M. Sc. in surficial geochemistry at Carleton University.

Bob Boehner



Exploration and Development Highlights

Despite the national downturn in mineral exploration and development, Nova Scotia continues to maintain a modest level of exploration (\$4-5 million for 1999), with several new projects advancing to the development stage. The following is a summary of current highlights.

Exploration

Kaoclay Resources Ltd. continues work to define the quality and extent of kaolin clay and silica sand deposits in the Musquodoboit and Shubenacadie valleys of central Nova Scotia. The company has completed bulk sampling, regional-scale and detailed grid drilling, and shallow seismic surveying. Kaoclay is currently conducting in-fill drilling, as well as performing analytical work at its small laboratory in Milford, Nova Scotia, and pilot plant in Georgia, USA.

Black Bull Resources Inc., under an option agreement with CAG Enterprises Ltd., has completed initial exploration for its Flintstone Rock kaolin-quartz project in southwestern Nova Scotia. The property lies along the Tobeatic Fault Zone, at the southern margin of the South Mountain Batholith. Work to date has included trenching, geophysical surveys (IP), diamond-drilling and sample testing. The company has completed 29 drillholes to date and reports that the target alteration zone varies from 100 to 200 m in width, exceeds 100 m in depth, and exceeds 1200 m in strike length.

NAR Resources Ltd., under an option agreement with Titanium Corporation of Canada Ltd., continued exploration for Ti-bearing sands in the Shubenacadie River, central Nova Scotia. The company completed 395 shallow vibro-core holes on sand bars exposed at low tide in the Shubenacadie River and Cobequid Bay. Samples collected from the core holes contained heavy mineral concentrations from 2% to 20%.

"Qualitative mineralogical test work" revealed the heavy mineral sands contain 34% ilmenite, 2% leucoxene, 7.5% rutile, 19% zircon, 5% garnet, 20% magnetite and 12.5% others.

LaFarge Canada Inc. carried out exploration drilling for limestone in the Hardwood Lands area, Hants Co., and the Brentwood area, Colchester Co.

Kelly Rock Ltd. completed additional work on the Glendale limestone deposit in Inverness County, consisting of trenching and rock sampling.

Mount Cameron Minerals Inc. completed a six-hole drill program for zinc-bearing skarns hosted by Precambrian carbonates in the Boisdale Hills area of Cape Breton Island. Only low-grade zinc was encountered; however, exploration led to the discovery of 'flake' graphite and Ni-Cu-Pt-Pd enrichment related to gabbroic intrusions in the area.

Newfoundland Goldbar Resources Inc. drilled a deep exploration hole at the former Dufferin Gold Mine, Halifax County. The company reported that ten new saddle reef quartz veins were encountered in the 396 m drillhole.

Indocan Resources Inc. conducted exploration drilling for gold at Isaacs Harbour, Guysborough County.

Development

Lynx Minerals Corporation commenced mining activities at their Scotsville open-pit barite mine, Inverness County, in June 1999. Lynx is supplying mud-grade barite for offshore petroleum drilling in eastern Canada.

C₂C Mining Corporation is continuing a detailed evaluation of the zeolite potential of amygdaloidal basalts along the North Mountain in western Nova Scotia. Zeolites reportedly constitute up to 20 weight percent of the basalt, in zones up to 10 m thick. The company has completed geological mapping, diamond-drilling, and analytical

work on several zeolite properties and has recently completed bulk sampling and test processing at its Stronach Mountain zeolite prospect. In addition, C₂C has conducted research and product development work on its zeolite properties. The company plans to build a processing facility in the Annapolis Valley.

Georgia Pacific Corp. has obtained conditional approval from Environmental Assessment and is in the process of obtaining an Industrial Waste Water Permit and a Mining Permit for its proposed surface gypsum mine at Melford, Inverness County. The deposit has combined proven and probable mineable reserves of 20 million tonnes of gypsum. Georgia Pacific plans to bring the new quarry into operation while phasing out its Sugar Camp mine near Port Hawkesbury.

Tusket Mining Ltd. and Knauf have commenced limited mining operations at the Murchyville Gypsum Mine in the Musquodoboit Valley, central Nova Scotia. Gypsum ore was shipped from Sheet Harbour in the summer of 1999.

Pioneer Coal Limited is evaluating the application of high-wall mining technology to extend mine life and increase production at its open-pit coal operations in northern Nova Scotia and Cape Breton Island.

Brogan Mining Company Ltd. completed a bulk sampling program for coal at Little Pond, Cape Breton County, in early 1999.

Construction of Fundy Gypsum Company's new crushing facility at its Miller Creek Mine, near Windsor, is nearing completion. The company plans to commission the crusher in early 2000.

Pasminco Limited purchased all of the assets of Savage Resources Ltd., including the former producing Gays River Pb-Zn mine and mill in central Nova Scotia. Pasminco continues the work needed to obtain the necessary permits for developing an open-pit mine at the site.

Mike MacDonald and Paul McCulloch

From the Mineral Inventory Files

A Different Perspective on the Eastville Zn-Pb Deposit

Eastville, Colchester County (Fig. 1), is the site of an intriguing base metal deposit. The deposit consists of stratabound Zn and Pb in the Cambro-Ordovician Meguma Group along 10 km of the contact between the predominantly metawacke Goldenville Formation and the overlying, slate-dominated Halifax Formation. Elsewhere, this contact, known as the Goldenville-Halifax Transition Zone (GHT), is host to several occurrences of Sn, W and base metals. The GHT includes calcareous metawacke and metasiltstone, as well as Mn-rich 'coticle' horizons.

St. Josephs Exploration Ltd. discovered Eastville in 1976 during exploration for gold. The site was explored until 1982, with 28 diamond-drill holes focused on three main sites: the East, West and House zones (Fig. 1). It was thought that all occurred within a 100 m thick sequence of GHT rocks. Most of the diamond-drill holes at Eastville intersected 2-10 m of 1-3% combined Zn-Pb (Zn > Pb). However, there are several higher grade intersections, especially in the more faulted East Zone where 4.09% over 9.33 m, 6.51% over 2.13 m, and 2.19% over 19.8 m were found.

Eastville was deemed a SEDEX deposit based on its similarity to the Aquilar deposit in Argentina. SEDEX is short for sedimentary-exhalative, a class of base metal deposit known to form such giant deposits as Sullivan (B. C.), Red Dog (Alaska), and Broken Hill and Mt. Isa (Australia). SEDEX deposits are stratabound and syngenetic, formed by hydrothermal fluids venting from fault structures into deep submarine basins under black shale-dominated, anoxic conditions. Eastville clearly displays features suggesting a SEDEX origin, but let's examine a few features that do not.

(1) Mineralized zones at Eastville, although stratabound, have a defi-

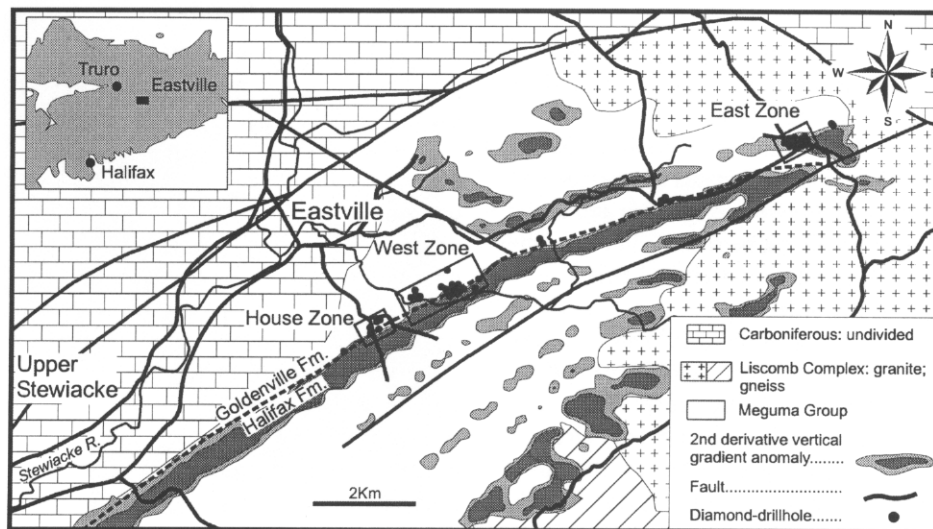


Fig. 1. Geology of the Eastville deposit with second derivative vertical gradient data.

nite structural control. The best developed zone is the highly faulted East Zone, where shear structures actually host a portion of the deposit. A study carried out by T. R. Stokes in 1986 (unpublished DNR data) showed that much of the Eastville mineralization is strongly associated with fractures, veins and veinlets.

(2) The Eastville area, especially the East Zone, is almost completely surrounded by granite and gneiss of the Liscomb Complex (Fig. 1). In fact, one of the East Zone drillholes bottomed in gneissic rocks. Before 1982 neither the full aerial extent of the Liscomb Complex nor its unique geology were known, but it may be significant that the complex hosts several base metal occurrences. One of these, the College Lake Pb-Sb Prospect, has the same Pb isotopic signature as the Eastville deposit.

(3) High resolution, second derivative vertical gradient data (Fig. 1) suggest that more than one stratigraphic unit is mineralized at Eastville. These data were not available during exploration of the site; geophysical data available then suggested that only one stratigraphic interval was mineralized. Figure

1 shows that the House and West zones occupy the same stratigraphic interval, but the East Zone may fall on a unit a few hundred metres to the north (i.e. stratigraphically lower). If so, the along-strike extension of the East Zone has never been tested by drilling.

(4) The GHT hosts significant deposits of Sn, W, Zn and Cu. All of these deposits (e.g. Dominique Sn-Zn-Cu, Duck Pond Sn-Zn, Pearl Lake Sn-Cu-Zn, Lazy Head W-Cu-Zn) are attended either by wide-spread skarn or skarnoid formation or by massive chlorite, pyrrhotite, silica, muscovite and garnet replacement alteration. In addition, these deposits are close to metal-rich, two-mica granite plutons and it appears that granite-derived mineralizing fluids, channeled along shear structures, infiltrated and reacted with the chemically receptive calcareous beds of the GHT. Similar processes may have played a role in the formation of the Eastville deposit. Any future exploration strategy at Eastville should address the possibility of structural control, and the chance that there may be more than one target stratigraphic interval.

George O'Reilly

Update on Professional Registration of Geoscientists

In 1996 the Honourable Jay Abbass introduced Bill 20, the *Engineering and Geoscience Professions Act*. This was a new act that would allow geoscientists to have the same legal status as engineers. Differences between engineers and architects could not be resolved in the context of that act, however, and Bill 20 died on the order paper.

The Association of Professional Engineers of Nova Scotia (APENS) is still committed to bringing geoscientists into a new organization mandated by a revised engineering act. The new organization would be called the Association of Professional Engineers and Geoscientists of Nova Scotia (APEGNS). APENS has decided to expedite the change by revising the existing engineering act to reflect "house-keeping" changes, inclusion of geoscientists, revisions to fee structures, and changes to committee and council membership. They hope to have a revised act ready by spring 2000. It is still not clear when the proposed new act will be tabled before the provincial legislature.

Meanwhile, geoscientists have organized themselves under the *Societies Act* into the Association of Professional Geoscientists of Nova Scotia. All members in good standing will be merged into APEGNS when the revised engineering act is passed and proclaimed.

All geoscientists in the province are invited to join the Association of Professional Geoscientists. The association provides a registration of geoscientists, a list of geoscientists qualified in specific disciplines, and a list of those who qualify for the Department of Environment's 'environmental site' professional status. You may request an application package by calling Pat Ryall (902-494-2694), Dave Carter (902-860-0968) or Howard Donohoe (902-424-7199).

Howard Donohoe

Oct. - Dec. Open Assessment Reports

Report No.	Claim Ref. Map	Licensee
81-021	011E/11D 011E/14A	Lacana Mining Corporation
97-070	011D/14A 011D/15B	Ellsin Resources Limited
97-101	011E/03B, C	Geostorage Associates Partnership
97-102	011F/09C 011F/16B	A J Perron Gold Corporation
97-103	011D/11C	Gammon Lake Resources Incorporated
97-104	011D/16C	Gammon Lake Resources Incorporated
97-105	011E/02B	Mason, J R
97-106	011F/09C 011F/16B	A J Perron Gold Corporation
97-107	011F/09C 011F/16B	A J Perron Gold Corporation
97-108	021A/08B	Anthony, R
97-110	021H/02D	WTC Resources Limited
97-111	021H/02B	WTC Resources Limited
97-112	021H/02B	WTC Resources Limited
97-114	021H/02C	WTC Resources Limited
97-115	021A/07C	Baker, R
97-118	011E/01A, B, C, D 011E/02A, B, D 011F/04C	RJZ Mining Incorporated
97-120	011K/10B	Aurora Gold Corporation
97-121	021A/08D	Collier, J E
97-122	011D/13D	MacDonald, M
97-123	021A/14A	Hudgins, A D
97-124	011D/14C 011E/03B	Hudgins, A D
97-127	011F/14A	Barrett, A M
97-128	011F/05A	Gammon Lake Resources Incorporated
97-129	011E/03B, C 011E/04A	Kaoclay Resources Incorporated
97-130	011E/02D	RJZ Mining Incorporated
97-134	011D/15B	Myers, J C
97-135	011D/15B	Myers, J C
97-136	011D/14C	DeBay, A
97-137	011K/03D	MacKay, G A
98-112	011K/02C	Grant, S

Susan Saunders and Norman Lyttle

In Search of Minerals and Prospectors

In April, DNR will offer basic prospecting courses in Sydney, Halifax and Parrsboro, and an advanced course in Stellarton. Classes meet once a week in the evening from 19:00 to 21:30 and run for eight weeks. The basic course has three weekend field trips and the advanced course has four. If you are interested, please go to the nearest DNR office, the Core Library in Stellarton (902-752-4842) or the Library in Halifax (902-424-8633) for information and an application form. Fees for the course are \$100 + HST for the basic course and \$180 + HST for the advanced course.

Mining Matters for Nova Scotia '99

Mining Matters for Nova Scotia '99: Opportunities for Economic Development was held in Halifax's World Trade and Convention Centre on Monday and Tuesday, November 8 and 9. The conference was a partnership of DNR, the Department of Economic Development, the Mining Society of Nova Scotia, the Nova Scotia Chamber of Mineral Resources and the Nova Scotia Prospectors Association. The meeting maintained the diverse program content initiated in 1998 as a way to illustrate the many contributions of minerals and mining to an equally diverse audience. Mining Matters '99 attracted a record-setting 428 registered participants.

Oral presentations were grouped into three themes: *Current Developments in Nova Scotia's Mining Industry* (session hosted by the Mining Society of Nova Scotia), *From Geoscience to Economic Development*, and *The Many Faces of the Mineral Industry*. Among the highlights of these sessions were presentations on new technologies being used in coal and gypsum mines in Nova Scotia, the development of strategies to adapt to global climate change, how pro-active public relations can minimize difficulties in exploration and development, and two non-traditional uses of Nova Scotia's geological resources - as stone for sculpture and the potential for a 'fossil trail' tourism initiative. The keynote address, *Water Resources and Economic Development in Nova Scotia*, was presented by Terry Hennigar of AGRA Earth and Environmental Limited (see *Nova Scotia Minerals Update* vol. 16, no. 4).

As usual, much of the audience spent more time in the poster session than at the talks. Although posters by DNR staff, university researchers, and the Geological Survey of Canada dominated, displays presented by the Nova Scotia Prospectors Association (see photo), mineral producers, mineral and gem collectors, and several other groups made for an interesting session.



Doug Bowes of the Nova Scotia Prospectors Association demonstrates gold panning techniques at Mining Matters for Nova Scotia '99.

This year also saw participation by six service and supply companies in a Tradex.

Two post-conference events were held on November 10. A Zinc Workshop, outlining Nova Scotia's potential for hosting polymetallic zinc deposits, attracted 45 participants. Dr. Grant Garven of Johns Hopkins University gave the keynote presentation on the role of basin fluids in zinc mineralization. Finally, some 30 guests, mostly from non-mining professions, learned more about the mineral industry through a field excursion to active mining operations in central Nova Scotia.

Mining Matters for Nova Scotia '99 was an unqualified success. Organizers are already incorporating suggestions for improvements into their planning for next year's conference, which will be held in Halifax on October 30 and 31. Mark your millennium calendars!

Mike MacDonald

Year 2000 Activities of the Nova Scotia Prospectors Association

The Nova Scotia Prospectors Association has ambitious plans for the year 2000, based on the desire of members in all parts of the province to be better informed, better trained, and more experienced prospectors.

The association will host a two-day field trip to the Sydney area of Cape Breton Island on 17-18 June 2000, with another field trip to western Nova Scotia on 17-18 September. Both trips will involve visits to interesting sites, a meeting of the association, a social event, plus a block of time devoted to a 'garage sale' of prospecting equipment. A number of one-day trips are also planned, including visits by small groups to the Core Library in Stellarton and the Minerals Engineering Centre at the DalTech Campus in Halifax. The popular monthly presentations in Dartmouth by members of the Canadian Mineral Society of Nova Scotia, staff

from DNR, and others, will continue throughout the year. We plan to make some of these presentations available to members in other parts of the province as well. The association is also developing a number of 'prospector experiences' available to small groups of prospectors, based on a contribution of effort by both the student prospectors and those providing the experience. Experiences will include such things as operating a highbanker, small crusher or spiral wheel, gold panning and sluicing, and use of the compass and map to ensure that prospectors have the skill to navigate in the wilderness and locate the boundaries of their claims.

If you are interested in joining the Nova Scotia Prospectors Association visit our World Wide Web page (<http://www.prospectors.ns.ca>) or contact Ken Hiltz at (902) 826-1687.

Ken Hiltz

The Prospector's Stake

This column is about the stake that all prospectors have in writing accurate, complete reports about their work. In the past several years, many prospectors have expressed confusion about the different reporting requirements of the Mineral Resources Act and the Prospector Assistance Program. I would like to clarify what is needed, and why, for each.

The Mineral Resources Act requires prospectors to submit written reports of their work on mineral licences. Those reports can be in the form of either a Technical Report or a Prospector's Statement. The Technical Report, which is often referred to as an Assessment Report, requires a large amount of detail about exploration work on a property. A Prospector's Statement is shorter, and provides only basic information about the claim. Detailed information about these two different kinds of report is contained in Sections 39 through 48 of the Mineral Resources Regulations made under Section 174 of the Mineral Resources Act.

The Prospector Assistance Program (PAP) also requires a report from anyone receiving a prospector assistance contribution. This report, the Prospecting Report Form, is twelve pages long. It is not a substitute for the report required under the Mineral Resources Act, and will not be accepted by the Registry of Mineral and Petroleum Titles as a report for assessment credit. As a prospector, you must submit either a Technical Report or a Prospector's Statement to the Registry. If you have received a contribution from the PAP, you must also submit a completed Prospecting Report Form with the PAP Coordinator.

Maps are important, mandatory parts of all three of these reports, and should be prepared carefully. All maps should be drawn at a useful scale, and should include a north arrow and some means of identifying where the map is located. Metric scales, such as 1:10 000, 1:20 000, 1:50 000 or 1:100 000, are most commonly used by geologists. Latitude and longitude, or a UTM grid reference for a known point on the map, are the easiest ways to locate a map.

Other things that should be accurately located on maps are the locations of all rock samples, soil or stream samples, or any other type of sample. Locations of trenches, diamond-drill holes or geophysical surveys must also be shown. Locations must be shown for all samples that have been analyzed or assayed on maps submitted as part of a Technical Report or a PAP Final Prospecting Form.

Why is all of this information required? Simply put, the Registry of Mineral and Petroleum Titles (under authority of the Mineral Resources Act and Regulations) and the Prospector Assistance Program require the data to manage the province's mineral and energy resources. Your reports also become part of a province-wide information store, that can be used by all prospectors and explorationists to plan and carry out future exploration programs. A first stop for prospectors and exploration companies undertaking a new exploration program in Nova Scotia is the DNR Library in Halifax, where all of the non-confidential Technical Reports and Prospector's Statements are filed. Knowledge gained from these reports can affect exploration plans. Accurate and complete information can make that exploration easier and less expensive.

In the end, every prospector has a stake in reliable and accurate reporting. Well written reports and accurate maps also increase your credibility as a prospector. Never underestimate the importance of credibility with your peers and with exploration companies.

Howard Donohoe

Special Note

New Regional Geologists for Western and Central Nova Scotia

In August 1999, Sandra Marshall began work as the regional geologist in western Nova Scotia, based in Bridgewater (902-543-8167). In September, Ian Lawyer took over the duties of regional geologist in central Nova Scotia, based in Bible Hill (902-893-5620). Both geologists joined the department's Regional Services Branch from private industry.

Dates to Remember

January 25-28, 2000

British Columbia and Yukon Chamber of Mines, Cordilleran Exploration Roundup: Gateway to Discoveries. Hotel Vancouver, Vancouver, British Columbia. For more information contact Sheila Holmes (604-681-5328).

February 11-12, 2000

Atlantic Geoscience Society, Annual Colloquium and General Meeting, Fredericton Inn, Fredericton, New Brunswick. For more information contact Chris White (902-424-2519).

March 5-10, 2000

Prospectors and Developers Association of Canada and the Canadian Institute of Mining, Metallurgy and Petroleum, Mining Millennium 2000: International Convention and Trade Show, Metro Toronto Convention Centre, Toronto, Ontario. For more information call the PDAC (416-362-1969).

March 21, 2000

Annual General Meeting of the Chamber of Mineral Resources of Nova Scotia, Harbourview Holiday Inn, Dartmouth, Nova Scotia. For more information contact Terry Daniels (902-798-0187).