Stimulating the Mineral Industry with Prospector Assistance

H. V. Donohoe, Jr.

Introduction

The Prospector Assistance Program (PAP) was designed to help prospectors learn prospecting skills, to provide a financial contribution to working a mineral claim, and to assist in marketing mineral properties. At the same time, the province benefits greatly. More trained people searching for minerals and enhancing the mineral potential of the province mean that the branch can promote more investment in Nova Scotia. Although the idea of prospector assistance is not new, the current program, which began in 1997, is different than previous prospector assistance programs.

History of Prospector Assistance

Prospector assistance programs began in the early 1990s as part of the Canada-Nova Scotia Cooperation Agreement on Mineral Development (CAMD). The Prospectors’s Assistance Program under the most recent CAMD (1992-1995) was one of the most popular programs under this agreement and the results were gratifying. There are now more than 640 registered prospectors with approximately 240 companies or individuals holding one or more mineral licenses in the province. Approximately 150 prospectors received assistance grants for work on their properties between 1992 and 1995. During the same time over 200 people took the Basic Prospecting Course and 12 took the first offering of the Advanced Prospecting Course.

The CAMDs also provided limited financial assistance to attend trade shows for marketing mineral properties. Many prospectors attended the Prospectors and Developers Association of Canada meeting in Toronto and were able to interest companies in their properties.

Current Prospector Assistance

The current Prospector Assistance Program builds on the past experience of the CAMDs. Now the Department of Natural Resources has brought together all parts of prospector assistance into one program instead of several. The program is funded by the Canada-Nova Scotia Cooperation Agreement on Economic Diversification, which is jointly administered by the Nova Scotia Department of Economic Development and Tourism, and Atlantic Canada Opportunities Agency (ACOA). The agreement has a value of $600,000 over fours years and will end in the fiscal year 2001-02. Over the life of the program, each of the three components is receiving strong support. Table 1 provides the budget for each component of the program and a comparison with the actual amounts spent.

The Prospector Assistance Program has been successful in obtaining the support of the prospecting community. Shortly after the program was made official in August 1997, the Minerals and Energy Branch hosted a workshop for stakeholders. Representatives of the prospecting community at large, the Prospectors Association of Nova Scotia, the Mining Society of Nova Scotia, and the Chamber of Mineral Resources of Nova Scotia met with branch staff to review the guidelines and operating procedures of the PAP. The department launched the program at the annual Review of Activities in November 1997.

The PAP is administered by a coordinator, Dr. Howard Donohoe, P. Geo., who is assisted by a committee comprising Dr. Michael Cherry, Director of the Mineral and Energy Resources Division, Michael MacDonald, Ron Mills and Paul MacCulloch. This team provides help to prospectors by training them in exploration skills and use of equipment, mentoring them as they make marketing contacts at trade shows and visiting them in the field.

Program Components

The program has three components: (1) prospector training, (2) prospector assistance and (3) marketing assistance. Although each component is independent of the others, all three are integrated in a uniform approach to encouraging the development of the province’s mineral potential.

Training Assistance. Prospector training provides support for training entry level prospectors in different
locations throughout Nova Scotia. An advanced course is offered as demand warrants and gives additional experience to prospectors who have graduated from the basic course. The demand for training has been great. We have tried to deliver basic prospecting courses in various parts of the province. Since the PAP began in 1997, 289 people have taken the basic and advanced prospecting courses. Graduates rate the course content and the instructors very favourably. Table 2 lists the locations of courses and the number of graduates in the past several years.

**Prospector Assistance.** Financial assistance under the prospector assistance component provides a base level of support for individual prospectors to search for new mineral deposits and to attract exploration activity by larger companies. Both the PAP and the prospector contribute toward the funding of a project. If a prospector has an application approved for the maximum amount of $5,000, then he or she is required to contribute a minimum of $1,500 or 30% more to the project. Prospectors may choose to pay for some of their out-of-pocket expenses and/or in-kind work for their

**Table 1. Budgeted and actual funds for the Prospector Assistance Program.**

<table>
<thead>
<tr>
<th>Component</th>
<th>Year 1 1997-98</th>
<th>Year 2 1998-99</th>
<th>Year 3 1999-00</th>
<th>Year 4 2000-01</th>
<th>Year 5 2001-02</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Training</td>
<td>Budget</td>
<td>$15,000</td>
<td>$25,000</td>
<td>$20,000</td>
<td>$20,000</td>
<td>$0</td>
</tr>
<tr>
<td>2. Assistance</td>
<td>Budget</td>
<td>$20,000</td>
<td>$100,000</td>
<td>$140,000</td>
<td>$140,000</td>
<td>$0</td>
</tr>
<tr>
<td>3. Marketing</td>
<td>Budget</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$0</td>
</tr>
<tr>
<td>Total Budgeted Amount</td>
<td>$65,000</td>
<td>$155,000</td>
<td>$190,000</td>
<td>$190,000</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>Total Budgeted Amount of PAP</td>
<td>$600,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual Amount Spent</td>
<td>$33,380</td>
<td>$120,344</td>
<td>$197,720</td>
<td>$171,162</td>
<td>$77,394 (est)</td>
<td>$600,000</td>
</tr>
</tbody>
</table>

**Table 2. Location of prospecting courses.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Students</th>
<th>Locations of Basic Course</th>
<th>Location of Advanced Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997, Fall</td>
<td>30</td>
<td>Port Hawkesbury, Halifax</td>
<td>Not offered</td>
</tr>
<tr>
<td>1998, Spring</td>
<td>58</td>
<td>Sydney, Halifax</td>
<td>Halifax</td>
</tr>
<tr>
<td>1998, Fall</td>
<td>64</td>
<td>Stellarton, Halifax, Bridgewater</td>
<td>Not offered</td>
</tr>
<tr>
<td>1999, Spring</td>
<td>30</td>
<td>Windsor</td>
<td>Stellarton</td>
</tr>
<tr>
<td>1999, Fall</td>
<td>45</td>
<td>Halifax, Sydney, Stellarton</td>
<td>Not offered</td>
</tr>
<tr>
<td>2000, Spring</td>
<td>30</td>
<td>Halifax</td>
<td>Truro</td>
</tr>
<tr>
<td>2000, Fall</td>
<td>32</td>
<td>Sydney, Bridgewater</td>
<td>Windsor</td>
</tr>
<tr>
<td>2001, Fall</td>
<td>n/a</td>
<td>Proposed for Yarmouth, Halifax, Sydney</td>
<td>Proposed; Location to be decided</td>
</tr>
</tbody>
</table>
share of the total contribution. Although they only need to contribute a maximum of 30% of the total program amount toward their project, prospectors often contribute considerably more. In Year 2 (fiscal 1998-99) prospectors contributed an additional 57% above the program amount, which is 27% above the minimum amount. In Year 3 (fiscal 1999-00) prospectors have contributed an additional 87% of the program funds (57% above the minimum). During year 4 (fiscal 2000-01) prospectors contributed 66% in additional funds (36% above the minimum required). The modest funding levels for the prospector assistance component are able to leverage a considerable amount of funds from prospectors. The number of projects and their targets are shown in Table 3. The geographic distribution of prospector projects for fiscal year 2000-01 is evenly distributed across the province and is shown in Table 4.

Marketing Assistance. The third component of the PAP is designed to assist in promoting and marketing a prospector’s mineral claims. Most marketing work is conducted at national and international trade shows. These provide an unparalleled opening to present Nova Scotia’s mineral potential and investment opportunities to mining companies and industry representatives. Marketing assistance for prospectors provides financial assistance to travel to trade shows, to display information and samples about properties, and to make contacts with industry people. Table 5 lists the various trade shows and the number of prospectors attending.

Importance of Prospectors

The reality of today’s mineral exploration industry is that prospectors are vitally important. The ‘grass roots’ of successful mining is having a local community of prospectors involved in searching for new deposits and carrying out exploration on known mineral occurrences. Their work makes mineral occurrences and deposits attractive to investors and mining companies.

Over the past ten years the exploration component of the mineral industry has changed significantly in Canada and Nova Scotia. Most mining and exploration companies have dramatically reduced their exploration staffs and curtailed the resources they would need for exploration. The result is a significant reliance on prospectors to find mineral properties, prospect them, and undertake geological, geochemical and geophysical surveys as needed. At the same time more exploration capital is moving to Central and South America and other parts of the world.

Prospectors have now assumed a stronger role in mineral exploration that they have had previously. They have always been part of the mineral industry at its ‘grass roots’ but now prospectors are expected to work a property to a higher level of development. The industry’s greater reliance on prospectors to do additional work creates a need for training, continuing education, financial assistance and marketing support. The Prospector Assistance Program in Nova Scotia is designed to accomplish all of these.

Measures of Success

Prospectors have been enthusiastic in supporting the PAP. Each of the prospector training courses has been filled and many of the graduates have staked claims. Interest in the prospector assistance contributions was so great in 1998 that we could only fund the first 22 applicants of a total of 36. As many as 80 prospectors will have benefited from prospector assistance contributions to work their mineral claims. From Table 5 it is clear that prospectors have appreciated the support for marketing their properties. During four years of the PAP operation, 61 prospectors have received financial assistance to travel to trade shows and market their mineral properties or products.

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>PAP Year; Fiscal Year</th>
<th>Number of Prospectors</th>
<th>Target Minerals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>Year 1, 1997-98</td>
<td>0</td>
<td>no prospector assistance component funding</td>
</tr>
<tr>
<td>1998</td>
<td>Year 2, 1998-99</td>
<td>22</td>
<td>vein and disseminated gold; paleplacer gold; kaolin; base metals</td>
</tr>
<tr>
<td>1999</td>
<td>Year 3, 1999-00</td>
<td>28</td>
<td>vein and disseminated gold; paleplacer gold; barite/fluorite; base metals; kaolin</td>
</tr>
<tr>
<td>2000</td>
<td>Year 4, 2000-01</td>
<td>14</td>
<td>vein and disseminated gold; zinc; paleplacer gold; base metals; kaolin</td>
</tr>
<tr>
<td>2001</td>
<td>Year 5, 2001-02</td>
<td>17, carry-over from year 4</td>
<td>vein and disseminated gold; zinc; paleplacer gold; base metals; kaolin</td>
</tr>
</tbody>
</table>
Table 4. Prospector assistance component projects by region in Year 4 (fiscal year 2000-01).

<table>
<thead>
<tr>
<th>Prospector Name</th>
<th>PAP Number</th>
<th>Target Commodity</th>
<th>Property Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Western Region</td>
</tr>
<tr>
<td>1. Alan Hooper</td>
<td>C00-010</td>
<td>Gold</td>
<td>Whiteburn Gold District</td>
</tr>
<tr>
<td>2. Ian Booth</td>
<td>C00-012</td>
<td>Zeolites</td>
<td>North Mountain</td>
</tr>
<tr>
<td>3. Charles Banks</td>
<td>C00-014</td>
<td>Tantalum</td>
<td>New Ross area</td>
</tr>
<tr>
<td>4. John Wightman</td>
<td>C00-020</td>
<td>Tin and Base Metals</td>
<td>Dominique, near East Kentville</td>
</tr>
<tr>
<td>5. Hubert Burrill</td>
<td>C00-021</td>
<td>Gold</td>
<td>Foote Cove Beach, north of Yarmouth</td>
</tr>
<tr>
<td>6. Brian Paul</td>
<td>C00-029</td>
<td>Feldspar</td>
<td>Seffersonville, Lunenburg County</td>
</tr>
<tr>
<td>7. Lindsay Allen</td>
<td>C00-032</td>
<td>Gold</td>
<td>Mill Village near Bridgewater</td>
</tr>
<tr>
<td>8. James Langley</td>
<td>C00-027</td>
<td>Ornamental Stone</td>
<td>Scotts Bay area</td>
</tr>
<tr>
<td>9. Henry Bent</td>
<td>C00-015</td>
<td>Rare Earths</td>
<td>Inglisville, Annapolis County</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Central Region</td>
</tr>
<tr>
<td>1. Karen McNulty</td>
<td>C00-003</td>
<td>Feldspar</td>
<td>Goodwood near Halifax</td>
</tr>
<tr>
<td>2. John MacIsaac</td>
<td>C00-005</td>
<td>Base Metals and Barite</td>
<td>Walton area</td>
</tr>
<tr>
<td>3. Andrew Baldwin</td>
<td>C00-006</td>
<td>Base Metals and Barite</td>
<td>Walton region</td>
</tr>
<tr>
<td>4. David Hutchings</td>
<td>C00-007</td>
<td>Base Metals and Barite</td>
<td>Walton area</td>
</tr>
<tr>
<td>5. Greg Morris</td>
<td>C00-009</td>
<td>Base Metals</td>
<td>Mt. Thom, NE of Truro</td>
</tr>
<tr>
<td>6. Anne Banks</td>
<td>C00-016</td>
<td>Gold</td>
<td>Icelander Settlement, Eastern Halifax County</td>
</tr>
<tr>
<td>7. Lyndon Jensen</td>
<td>C00-018</td>
<td>Base and Precious Metals</td>
<td>Cumberland Basin</td>
</tr>
<tr>
<td>8. Joseph Collier</td>
<td>C00-026</td>
<td>Gold</td>
<td>South Stewiacke River</td>
</tr>
<tr>
<td>9. Voltix Corporation</td>
<td>C00-033</td>
<td>Barite</td>
<td>Middle Stewiacke area</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eastern Region</td>
</tr>
<tr>
<td>1. Joe Richman</td>
<td>C00-001</td>
<td>Limestone</td>
<td>Creignish Hills</td>
</tr>
<tr>
<td>2. Anthony Barrett</td>
<td>C00-002</td>
<td>Limestone and Base Metals</td>
<td>Creignish Hills and Lime Hill</td>
</tr>
<tr>
<td>3. Gaye Johnson</td>
<td>C00-008</td>
<td>Base Metals and Gold</td>
<td>MacLeod Brook region, Cape Breton Highlands</td>
</tr>
<tr>
<td>4. Diane Smeltizer</td>
<td>C00-011</td>
<td>Andalusite</td>
<td>Lundy, S of Guysborough</td>
</tr>
<tr>
<td>5. Steve King</td>
<td>C00-013</td>
<td>Rare Earths</td>
<td>Lower Caledonia, W of Guysborough</td>
</tr>
<tr>
<td>6. John Burton</td>
<td>C00-015</td>
<td>Gold</td>
<td>Barachois Brook, SE CB Highlands</td>
</tr>
<tr>
<td>7. Clayton Fraser</td>
<td>C00-017</td>
<td>Gold</td>
<td>Barachois Brook, SE CB Highlands</td>
</tr>
<tr>
<td>8. Avard Hudgins</td>
<td>C00-019</td>
<td>Gold</td>
<td>Whytocomagh area</td>
</tr>
<tr>
<td>9. Thomas Faulkner</td>
<td>C00-024</td>
<td>Gold, Base Metals</td>
<td>Ocean View region, Gabarus Bay</td>
</tr>
<tr>
<td>10. Dennis Forgeron</td>
<td>C00-025</td>
<td>Gold, Base Metals</td>
<td>Ocean View region, Gabarus Bay</td>
</tr>
<tr>
<td>11. Kevin McAllister</td>
<td>C00-028</td>
<td>Gold</td>
<td>Isaacs Harbour area</td>
</tr>
<tr>
<td>12. Scott Grant</td>
<td>C00-030</td>
<td>Gold</td>
<td>Middle River area, Southern Cape Breton Highlands</td>
</tr>
<tr>
<td>13. Curran Jensen</td>
<td>C00-034</td>
<td>Gold, Base Metals</td>
<td>Browns Mountain area, W of Antigonish</td>
</tr>
</tbody>
</table>
Table 5. Trade shows attended by prospectors.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Trade Show; Types of Properties</th>
<th>Number of Prospectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>January, 1998 Year 1 1997-98</td>
<td>Vancouver</td>
<td>British Columbia and Yukon Chamber of Mines Cordilleran Roundup; disseminated and vein gold</td>
<td>3</td>
</tr>
<tr>
<td>March, 1998 Year 1 1997-98</td>
<td>Toronto</td>
<td>Prospectors and Developers Association of Canada; paleoplacer gold, vein gold, base metals, rare earths</td>
<td>14</td>
</tr>
<tr>
<td>January, 1999 Year 2 1998-99</td>
<td>Vancouver</td>
<td>British Columbia and Yukon Chamber of Mines Cordilleran Roundup; paleoplacer gold, barite/fluorite, base metals</td>
<td>4</td>
</tr>
<tr>
<td>January, 1999 Year 2 1998-99</td>
<td>Toronto</td>
<td>Landscape Ontario trade show; various styles and sizes of shaped granite cobbles and granite tiles</td>
<td>1</td>
</tr>
<tr>
<td>March, 1999 Year 2 1998-99</td>
<td>Toronto</td>
<td>Prospectors and Developers Association of Canada; vein and disseminated gold, base metals, barite</td>
<td>12</td>
</tr>
<tr>
<td>June, 1999 Year 3 1999-00</td>
<td>Halifax</td>
<td>Municipal Expo; various styles and sizes of shaped granite cobbles and granite tiles</td>
<td>1</td>
</tr>
<tr>
<td>January, 2000 Year 3 1999-00</td>
<td>Vancouver</td>
<td>British Columbia and Yukon Chamber of Mines Cordilleran Roundup; vein gold in former gold districts; paleoplacer gold</td>
<td>4</td>
</tr>
<tr>
<td>March, 2000 Year 3 1999-00</td>
<td>Toronto</td>
<td>Prospectors and Developers Association of Canada; vein gold in former gold districts; paleoplacer gold; zinc skarn deposits; sedimentary zinc deposits; base metals</td>
<td>10</td>
</tr>
<tr>
<td>March, 2001 Year 4 2000-01</td>
<td>Toronto</td>
<td>Prospectors and Developers Association of Canada; vein gold in former gold districts; paleoplacer gold; rare earths in pegmatite; zinc skarn deposits; sedimentary zinc deposits; base metals</td>
<td>12</td>
</tr>
</tbody>
</table>

Another measure of success is how the mineral industry views the properties offered at various trade shows. Companies from Australia, South Africa, the United States, as well as Canada, have expressed interest in the properties marketed by Nova Scotia prospectors either through the publication Properties for Option in Nova Scotia or at trade shows. Some of the interest has resulted in option agreements where additional money is spent on mineral exploration and development.

What does the province get for the modest investment in the PAP? Prospectors locate and define more of the mineral occurrences and deposits in the province. Their work assists the Department of Natural Resources to promote the province’s mineral potential and geological environments. If just one prospector’s project goes into production, the amount of capital expenditures for infrastructure, wages, taxes and other benefits will dwarf the modest investment of $600,000 from the Prospector Assistance Program by a factor of 50 or more.

Importance of the Program for Nova Scotia

Prospecting is the grass roots of the mineral industry. Without a trained and motivated community of prospectors, many of the mineral deposit discoveries that we need for future production will not be made. In this sense prospectors are the future of the industry.

In Nova Scotia, the Prospector Assistance Program is successfully providing training, financial assistance and marketing assistance. When prospectors succeed in bringing companies to the province for further exploration and development work they are contributing toward economic benefits. If some of these mineral properties are eventually brought into production as mines, then Nova Scotians benefit from the creation of wealth and employment.