

Assistance to Prospectors and Small Developers at the Nova Scotia Department of Natural Resources

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The Nova Scotia Department of Natural Resources (DNR) is the only natural resource department in the nation to have a full-time staff geologist devoted to assisting those in the mineral exploration industry with projects in the pre-development phase, such as prospectors and small developers. Assistance consists of a variety of tasks ranging from prospector education and development, office assistance on site and at the department's office in Halifax, field assistance on site anywhere in the province, assistance in developing promotional material with exploration plans, assistance with data reduction, assessing results on mineral exploration properties, and contributing to the development of the Nova Scotian mineral exploration industry in general. Assistance and liaison with the various industry bodies, such as the Nova Scotia Chamber of Mineral Resources, the Nova Scotia Prospectors Association, the Nova Scotia Mining Society and the Nova Scotia Mineral and Gem Society, is offered to assist these groups address legislative and policy issues related to their common goals, such as access to ground for the purpose of prospecting.

Prospector education and development consists of course development, field trip development and delivery to large groups, workshops on exploration techniques and issues of importance, on-site education in small groups as well as one-on-one meetings, and field assistance on prospects and properties. Mineral exploration industry trends are considered when deliberating prospector education needs. Geological environments that meet the criteria as amenable to exploration for the commodities that conform to such trends are highlighted and promoted. This is carried out in conjunction with other promotional efforts within the Geological Services Division, such as the promotion of the current IOCG (iron oxide-copper-gold) exploration model, which is analogous to the

model presented for hydrothermal vein breccia deposition in the Cobequid-Chedabucto Fault Zone (O'Reilly, 1996).

The two major field trips per year, which are planned and implemented in co-operation with the Nova Scotia Prospectors Association, have two main purposes. The field trips educate prospectors in the field as well as highlight mineral prospects for the purpose of further prospecting and subsequent development, if warranted. This has resulted in the staking of hundreds of active claims in areas where field trips have taken place within the last calendar year. Very readable field guides have been indexed and placed in the library of the Nova Scotia Department of Natural Resources as resource material for those engaged in mineral exploration, adding to the provincial database of material used for the purpose by both enthusiasts and professionals.

Further to this purpose of prospector education, DNR is developing a web-based prospecting course, with course materials that will be available to prospectors online. This will include copies of past field trip guides, so that interested parties will be able to reconstruct past field trips, as well as access to information pertaining to the many types of exploration techniques that are applicable in Nova Scotia, mining legislation, and general prospecting information and development modules.

A large component of assistance offered to prospectors consists of on-site field assistance with prospectors, delivered one-on-one or to small partnerships. This work is continuous, at many localities around the province. This also means that assistance is often offered with respect to library research, as well as the development of maps and reports for properties.

One-on-one assistance has resulted in the discovery of new gold-bearing veins on properties in traditional gold districts such as Oldham, Halifax County, Whiteburne, Queens County, and North Brookfield, Queens County, as well as discovery of previously undocumented workings at North Brookfield, Queens County, and near Voglers Cove, Lunenburg County. Exploration in these traditional gold districts is not confined to activities on traditional sites within the districts either, as shown by exploration of a new lode gold target in the Goldenville, Guysborough County, vicinity, following a new exploration model developed by the mineral rights holder with the assistance of DNR or in the case of an entirely new discovery in the Ecum Secum, Guysborough County, area. Discoveries of previously unreported exploration and development in the Tangier, Halifax County, area, and the Farmington, Lunenburg County, area are also under investigation. Outside of traditional gold districts, follow-up work continues on other gold prospects, as well as prospects for the development of base metals, rare earth elements, and industrial mineral deposits in most counties of Nova Scotia.

Some issues of land use at active pits and

quarries are being co-ordinated by the Geological Services Division in an effort to keep pit owners aware of issues of importance to them as well.

A natural extension of the prospecting activity involves education about prospecting in particular, and geology in general, to those in related fields of interest. To this end, the project reaches out to those scientists and activists in related fields at DNR functions involving forestry science, at international forums, such as the Canadian Quaternary Association meeting held in Halifax in August 2003, and has even found a place among members of the natural science community while attending events at park facilities run by DNR. This results in small targeted publications for these groups as well as for the (park) facilities involved.

Reference

O'Reilly, G. A. 1996: Vein and breccia deposits of Fe-Cu-Co-Ni-Ba-Au associated with the Cobequid-Chedabucto Fault Zone, Nova Scotia; Nova Scotia Department of Natural Resources, Information Circular 47.