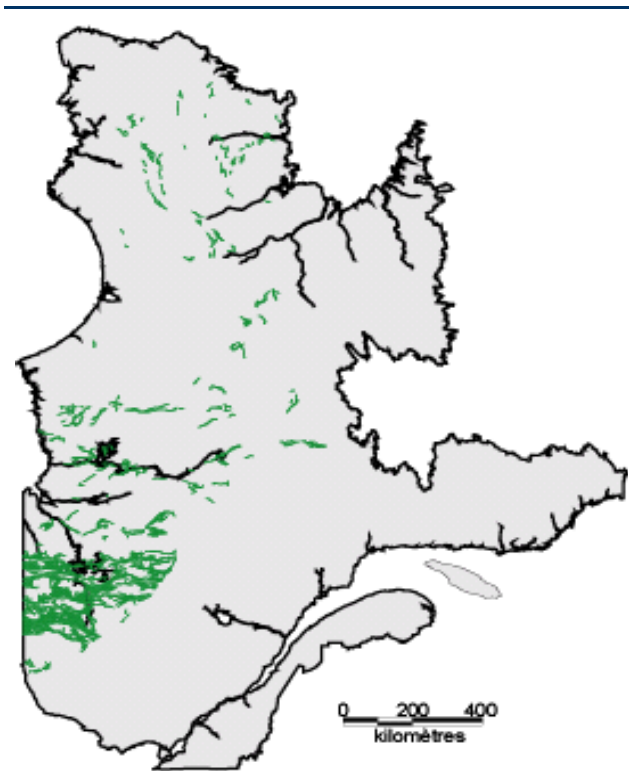


Project 2003-1: Fertility of small greenstone belts

Archean cratons contain a host of greenstone belts with a variety of geometrical (size and shape), lithological (assemblages) and chronological features. Quebec is no exception, and the Abitibi Subprovince, the largest greenstone belt in the world, is well-known for its prolific resources in terms of base metal and precious metal mineralisation. However, the territory also contains smaller belts, especially in the James Bay area and a whole series of small belts in Northern Quebec.

The question being asked is whether the geometric parameters of the greenstone belts (size and shape) have a relationship with a significant mineralisation potential. The first step in addressing the question was building a worldwide database of greenstone belts. The purpose of the database is to establish any relationship that may exist between the mineralisation, lithology and size of the greenstone belts. Depending on the definition, there are between 400 and 450 greenstone belts around the world. The present study documents more than 300 belts varying in age from the Archean to the Paleoproterozoic, a number considered to be representative. A large part of the information was obtained from the literature. Along with summarising the lithostratigraphy of the belts, special attention was paid to documenting the mineralisation within them. The results of the database analysis are presented in project 2004-1.



Location of Archean greenstone belts in Quebec.

Summary: Project 2003-1	
Objectives	<ul style="list-style-type: none"> To determine the combination of criteria that allows the characterisation of the fertility of small Archean greenstone belts.
Results	<ul style="list-style-type: none"> Construction of a worldwide database of greenstone belts containing their main lithological, structural, metamorphic and geochronological features; Integration of the data in a GIS; Documentation of economic deposits in selected small Archean belts.
Tools and Innovations	<ul style="list-style-type: none"> Worldwide database on greenstone belts allowing a comparison with belts in Quebec.
Note	<ul style="list-style-type: none"> Project is continuing in 2004-2005 (project 2004-1).