

A GUIDE TO
ROCK
& MINERAL
COLLECTING
IN NOVA SCOTIA



Introduction

Rock and mineral collecting is a popular hobby that is enjoyed by people of all ages. A fascination with the natural history of our surroundings, and in particular, a curiosity about the rocks and minerals that form the foundation of the world we live in, is great motivation for adventure and discovery. The remarkable diversity of geological formations in Nova Scotia provides a unique opportunity for rockhounding enthusiasts to pursue their hobby.

The potential for the discovery of unique rock and mineral specimens in Nova Scotia is a result of the complex geological history of the province. Rock formations range in age from 1.2-billion-year-old metamorphic rocks to 130-million-year-old sedimentary rocks of the Cretaceous period. The geological history of Nova Scotia has included several periods of active geological events. Large masses of granitic rocks pushed close to surface and volcanic flows erupted in different areas, such as the North Mountain basalts along the Bay of Fundy. Widespread continental and marine sedimentary rocks such as sandstones and limestones were also deposited throughout Nova Scotia. In addition, the province consists of two different geological terranes (landmasses). The Avalon Zone, which forms the northern half of the province, is part of



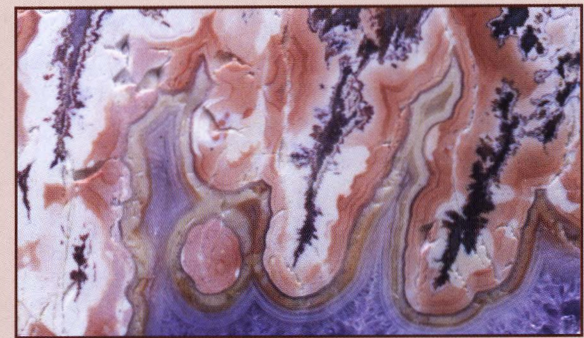
the original landmass of eastern Canada. The Meguma Zone, which forms the southern half of the province, was originally part of another continent that pushed against the North American landmass about 400 million years ago. The two landmasses are separated by a large east-west fault known as the Cobequid-Chedabucto Fault Zone.

Many mineral deposits and unique mineral specimens can be found in a wide range of geological formations throughout the province. This has resulted in a rich and diverse source of material for the rock and mineral collecting enthusiast. To help the collector, geological maps, reports, and many other related publications may be obtained from the Department of Natural Resources. Some of this information is essential for anyone looking for information on rocks and minerals in Nova Scotia.

Guidelines for the Collector

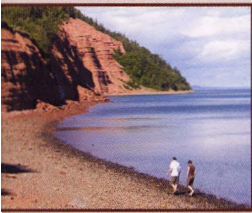
The Province of Nova Scotia has developed a set of guidelines to help the rock and mineral collector. This is to help ensure that rockhounding enthusiasts follow their hobby in a safe and responsible manner with respect to the environment, landowners, and other land users. This also includes other enthusiasts who may be pursuing the lure of rock and mineral collecting.

The guidelines set forth in this information brochure are focused specifically on the activities of the casual rock and mineral collector. Recreational gold panning is considered part of rock and mineral collecting, but is

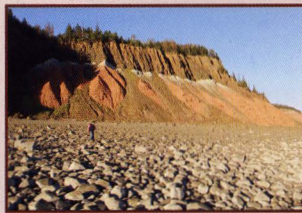


PROVINCE OF NOVA SCOTIA

restricted to the use of a gold pan. In contrast to rocks and minerals, the collection of fossils falls under the Special Places Protection Act. Fossils are designated as "heritage objects" and require a special permit for collecting.

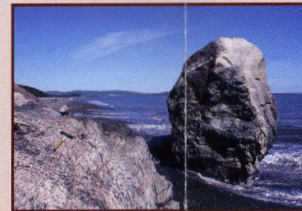


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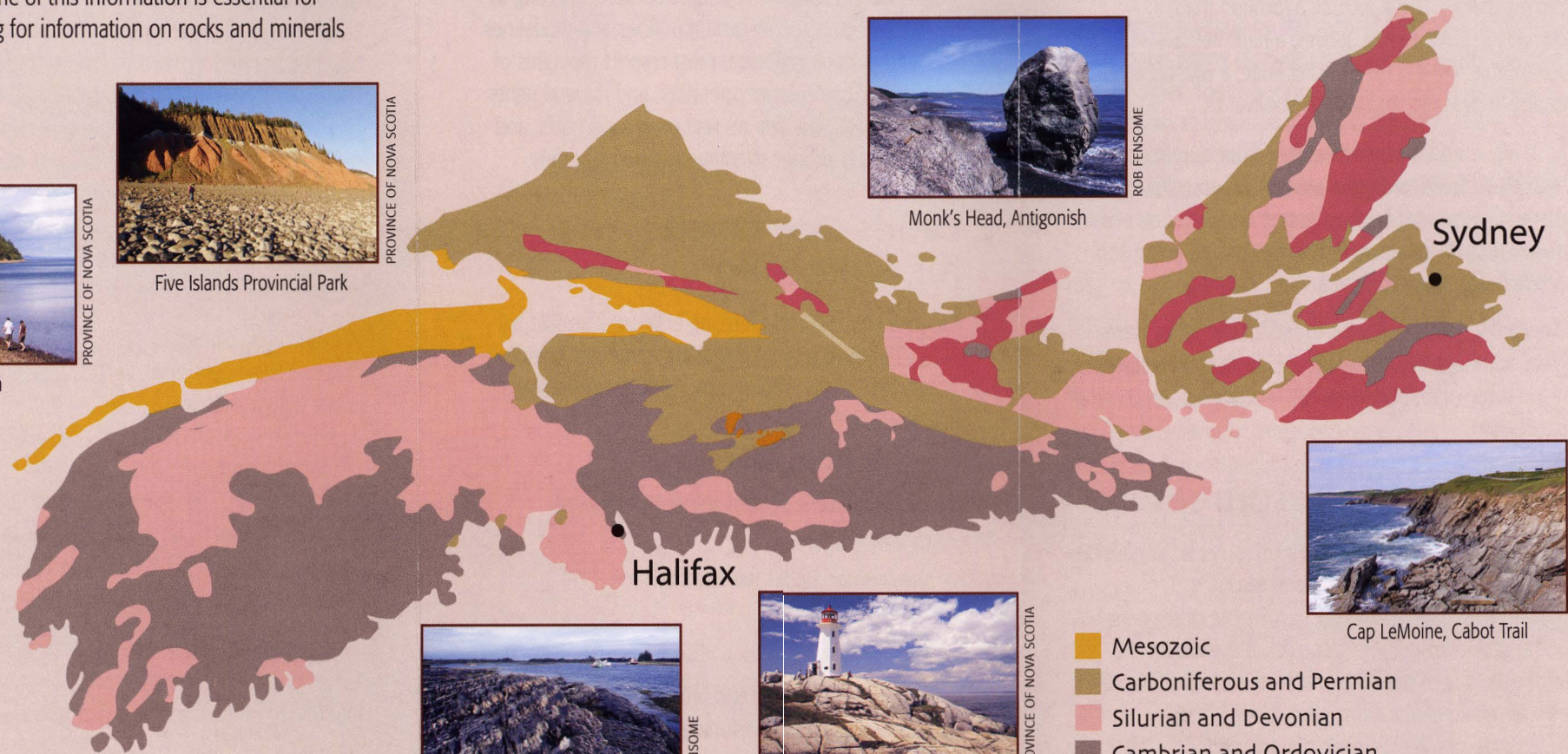
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Five Islands Provincial Park



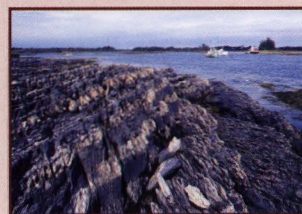
ROB FENSOME

Monk's Head, Antigonish



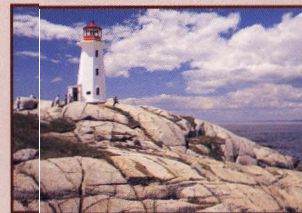
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Cap LeMoine, Cabot Trail



ROB FENSOME

Blue Rocks, near Lunenburg



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Peggy's Cove

- Mesozoic
- Carboniferous and Permian
- Silurian and Devonian
- Cambrian and Ordovician
- Precambrian

Specific guidelines for recreational rock and mineral collecting are outlined as follows:

- Collecting is done for personal interest, recreation, or pleasure.
- Samples are obtained using hand tools only, with no ground disturbance.
- The amount of material removed from a specific site must not exceed what would be considered easy to carry unassisted by the collector.
- Collecting at a specific site or location is restricted to one day per year.
- No collecting is to be carried out for any commercial purposes outside the province.

In addition, casual or hobby collectors are responsible for the following:

- They must have the necessary permission from the landowner.
- Collecting must not conflict with other land users or businesses.
- Collecting must not be carried out in areas where it is not permitted.
- Collecting must be appropriately limited in areas with specific restrictions
- Collecting must be done in a manner that respects the environment.
- Collecting must be carried out in a safe and responsible manner.



Keep Your Hobby Safe

To fully enjoy your experience as a rock and mineral collector, it is essential that you pay particular attention to safety issues. Many of the areas that are considered excellent sites for collecting are also inherently dangerous. Collecting at many sites requires careful planning and a good knowledge of the area.

Of primary concern are the many abandoned mine sites that are found throughout the province. Dozens of old mine shafts can be found at many of the former gold and base metal mining operations. Some shafts remain open and are generally filled with water. They can also be partially collapsed with treacherous slopes. Often, the only evidence of the presence of a shaft may be a small rectangular opening on the ground that may look like a small pond. Many of these sites have been marked with danger signs. The majority, however, are not marked and remain a significant hazard to the unwary. In addition, numerous open slopes and tunnels also provide access to various underground workings. These can be extremely dangerous and should never be entered. Rotting support structures, dangerous gases or bad air, unstable rock formations, and water-filled holes or vertical shafts can occur along the access tunnels.

Other prime collecting sites are found along Nova Scotia's extensive coastal shorelines. Cliff faces may reach 100 metres or more in height. These cliff faces are difficult and dangerous to climb, and you should always be aware of the potential for falling rocks. In addition, the extreme tides in some areas of the province can quickly leave you stranded or possibly in serious danger during a rising tide. This is especially the case in the Bay of Fundy and Minas Basin areas.

Although Nova Scotia is not a large province, it does have its share of woods and forested areas. It is easy to get lost, especially if you are a newcomer to the province. Part of your collecting experience should



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include careful preparations before undertaking any rockhounding excursions. As well as the basic equipment that would go into every rockhound's backpack, there are other important items you should carry with you. These include a location map, a compass, safety glasses, gloves, a hard hat, a serviceable first-aid kit, a pocket knife, a whistle, a cell phone, if possible, and a basic survival kit.

As in any outdoor pursuit, safety is your number one responsibility. Regardless of where you go collecting, make sure that you have someone else with you. Also make sure that others know where you are going and when you are expected back.

We want you to enjoy your experience in Nova Scotia's great outdoors. We also want you to do so in a safe and responsible manner, so you will look forward to coming back soon.

The Mineral Resources Act

The purpose of the Mineral Resources Act is "to support and promote responsible mineral resource management consistent with sustainable development" of the province's mineral deposits. This includes the administration of the province's mineral rights, as well as overseeing exploration, development, and production of the province's mineral deposits.

By strict definition, mineral specimen collecting is not permitted under the Mineral Resources Act unless a person has a mineral exploration licence or is prospecting with the intent to apply for an exploration licence. All minerals belong to the Province of Nova Scotia, and the province is responsible for administering its mineral resources.

The province recognizes, however, that casual mineral collecting does not normally entail mechanical or disruptive means to collect samples. The province also recognizes that rock and mineral collecting is a popular hobby. This is the case in most other jurisdictions throughout Canada and other parts of the world. In fact, the Province of Nova Scotia generally encourages the pursuit of rock and mineral specimen collecting as long as collectors follow certain policies and guidelines. Rock and mineral collectors must respect the rights of landowners, commercial operators, and mineral rights holders. They must also respect other land users, and they must pay proper attention to personal safety.

Lands Not Open for Collecting

The rock and mineral collecting enthusiast should be aware that there are lands that are either not open to collecting or have certain restrictions. These lands include the following:

- national (federal) parks
- provincial parks (limited collecting is allowed in some parks)
- sites named under the Special Places Protection Act
- First Nations reserves
- public lands (federal and provincial) that ban all or some collecting, including wilderness areas,

nature reserves, protected beaches, and core habitat for endangered or threatened species

- private lands without the permission of the landowner (see below)

Ask Permission First

It is the responsibility of the rock and mineral collector to find out the status of land ownership. Detailed information on landowners can easily be obtained at one of the Land Information Services (LIS) offices located throughout the province.

Nova Scotia consists of just over 5.55 million hectares in total landmass. Roughly 3 per cent of this area is federal land, 29 per cent is provincial Crown land, and 68 per cent is private land. Most Crown land, including beaches, is open for rock and mineral collecting. Provincial parks and other areas, however, may not allow collecting or may have certain restrictions. It is the responsibility of the collector to check first with local Natural Resources or parks staff. The removal of materials from beaches may be subject to some restrictions under the Beaches Act, although this should not affect the casual collector.

With privately owned lands, the rock and mineral collector *must* get permission of the landowner before going onto a property to collect samples. In addition, if a mineral exploration licence has been issued over a property, the collector must also obtain permission from the mineral rights holder. Information on the status of mineral rights may be obtained from the Registry of Mineral and Petroleum Titles at the Nova Scotia Department of Natural Resources.

The collector must also abide by any terms or agreements that are established by either the landowner or the mineral rights holder.