A Walking Tour Of Rocks, Minerals, And Building Stones In Downtown Halifax



Department of Mines and Energy

Information Circular 3



Introduction

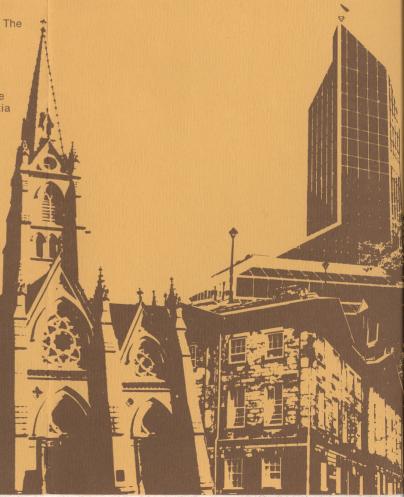
The purpose of this walk is to show the different types of rocks and minerals used in building stones throughout downtown Halifax and to highlight the historical development of the building stone industry in Nova Scotia. With the renovation and restoration of the legislative building. Province House, attention has been focused on the contribution of Nova Scotia quarries to the building stone industry. Between 1800 and 1940 over a dozen major quarries and many smaller ones were operated in the Province. From these quarries. three main rock types were quarried for building stones in Halifax. Red and brown Wallace sandstone of Carboniferous age (300 million years old) came from the Amherst-Wallace-Pictou region; slate and quartzite of the gold-bearing Meguma Group (500 m.y.o.) came from the Halifax area and granite from Purcells Cove, Terence Bay, and Nictaux. Granite was also quarried at Shelburne and Queensport. All of these granites are about 375 m.y.o. Other building stones used in Halifax have been imported from Italy, Norway, Belgium, and Vermont.

This walking tour is one of the many projects designed to increase public awareness of Nova Scotia's mineral resources. Projects such as this are supported by the Public Information Program of the Canada-Nova Scotia Mineral Development Agreement. This same Agreement is supporting a study to locate additional building stone resources in the Province. The tour emphasizes the importance of building stone to the mineral industry in the past and its future potential.

For a more comprehensive guide to the Halifax area, consult the expanded version of "Rocks, Minerals, and Building Stones in Downtown Halifax," available from the Nova Scotia Department of Mines and Energy, Nova Scotia Museum, and Nova Scotia Government Bookstore.

The building stones used in Halifax buildings illustrate many examples of the three categories that geologists use. The list below gives the definition of each rock category and examples found on the walking tour.

- Igneous rocks: formed by the cooling of molten rock.
 Light Coloured: granite, syenite
 Dark Coloured: gabbro, gabbroic anorthosite, anorthosite troctolite
- Sedimentary rocks: formed from the weathering and disintegration of other rocks...sandstone, limestone
- Metamorphic rocks: formed by the alteration of pre-existing rocks by heat and pressure. ironstone, slate, quartzite, marble
- 1. Old Town Clock, 1780 Brunswick Street: built in 1803 on orders of Edward, Duke of Kent; ironstone foundation (probably quarried at Purcells Cove) added in 1906; wall along Brunswick Street is of local quartzite; the clock has never stopped ticking.



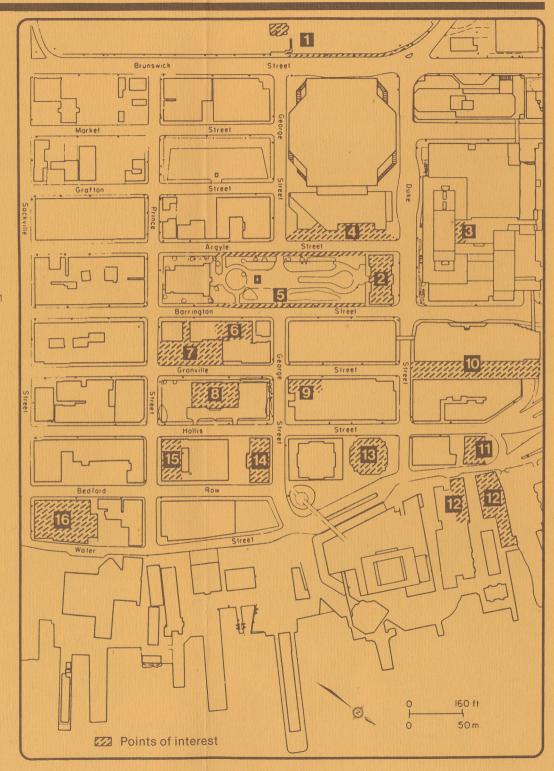
- 2. City Hall, 1841 Argyle Street: built in 1888 on foundation of old Dalhousie College; sandstone from Wallace and Pictou, Nova Scotia; red granite of columns probably from St. George, New Brunswick; surface of copper roof weathered to green malachite.
- 3. Birks in Scotia Square, Duke Street: faced with Belgian marble called "Rouge Royale", installed in 1969; fossils of brachiopods and large white colonial corals.
- 4. World Trade and Convention Centre, 1800 Argyle Street: built in 1984; walkway and low walls of syenite, an igneous rock, about one billion years old (b.y.o.), quarried at Bagotville, northern Quebec.
- 5. Grand Parade Wall, Barrington Street: grey granite (igneous) from Northwest Arm; good xenoliths (rock inclusions).
- **6. Birks, 1731 Barrington Street:** blue-black gabbroic anorthosite (igneous), over one b.y.o.; notice the brilliant blue feldspars; imported from Norway.
- 7. One Government Place, 1720 Granville Street: built in 1985; faced with grey granite, over 600 m.y.o., from near San Sebastián, Spain.
- 8. Province House, 1723 Hollis Street: Canada's oldest seat of government; designed by John Merrick and built in 1811; brown sandstone from Wallace. Nova Scotia.
- 9. Merrill Lynch Building, 5171 George Street: formerly Canadian Imperial Bank of Commerce; built in early 1900s; granite from Terence Bay, Nova Scotia; diagnostic pale yellow-green colour.

- 10. Mall on Granville Street: shops: tan sandstone from Wallace, Nova Scotia; red sandstone from Albert Quarries, Marys Point, New Brunswick: grey granite paving slabs from Nictaux (Annapolis Valley); planters of black South African troctolite (an igneous rock compsed of feldspar and olivine); about two b.v.o.
- **11. Jerusalem Warehouse, 1879 Hollis Street:** home of Morses' Tea; built in 1841; ironstone probably from Purcells Cove; blue quartzite typical of Waverley-Bedford region.
- 12. Historic Properties, Lower Water Street: several stone buildings date from early-to mid-1800; local ironstone, with granite and sandstone trim.
- 13. Central Trust Building, 1801 Hollis Street: completed in 1985; grey granite about 395 m.y.o. from Stanstead, Quebec; white Carrara marble, approximately 150 m.y.o., from near La Spezia, Italy.
- **14. Old Post Office Building, 1741 Hollis Street:** opened 1871; red sandstone from Hopewell Quarries, New Brunswick; grey granite foundation from Northwest Arm.
- 15. Bank of Nova Scotia, 1709 Hollis Street: completed in 1931; Bedford limestone, about 490 m.y.o., from Phillipsburg, Quebec; fossils of crinoids and bryozoans; grey granite in foundation from Hampstead area, New Brunswick.
- 16. One Sackville Place, 5121 Sackville Street: built in 1963; Outside: white marble, about 490 m.y.o., from Danby, Vermont; fine grained gabbro (igneous), about two b.y.o., probably from South Africa; coarse grained anorthosite (igneous), over 600 m.y.o., from Alma, Quebec. Inside: Travertine limestone, less than 65 m.y.o., from near Rome, Italy.





- 1. Old Town Clock, and retaining wall, 1780 Brunswick Street
- 2. City Hall, 1841 Argyle Street
- 3. Birks in Scotia Square, Duke Street
- World Trade and Convention Centre, 1800 Argyle Street
 Grand Parade Wall, Barrington
- Street
 6. Birks, 1731 Barrington Street
- 7. One Government Place, 1720 Granville Street
- 8. Province House, 1723 Hollis Street
- 9. Merrill Lynch Building, 5171 George Street
- 10. Mall on Granville Street
- 11. Jerusalem Warehouse, 1879 Hollis Street
- 12. Historic Properties, Lower Water Street
- 13. Central Trust Building, 1801 Hollis Street
- 14. Old Post Office Building, 1741 Hollis Street
- 15. Bank of Nova Scotia, 1709 Hollis Street
- 16. One Sackville Place, 5121 Sackville Street





Department of Mines and Energy

Honourable Jack MacIsaac Minister

John J. Laffin, P.Eng., FEIC. Deputy Minister

> Yvonne Brown, Martha Devanney, Howard Donohoe, Susan Doyle, and Margaret Shaw

> > April, 1986 Reprinted March, 1989

A co-operative project between the Nova Scotia Museum, Department of Education and the Department of Mines and Energy

Canada-Nova Scotia Mineral Development Agreement



Funding for this project is from the Public Information Program of the Canada-Nova Scotia Mineral Development Agreement.