

**LEGEND**

**PALEOZOIC**

**LATE DEVONIAN**

**SOUTH MOUNTAIN BATHOLITH** (listed in order of increasing mafic mineral content, modified after MacDonald, 1994)

- Dsbm: KEDDIFREES MUSCOVITE LEUCOGNANITE (Dsbm); buff, orange, pink, red, white; predominantly fine- to medium-grained, minor coarse-grained; porphyritic, equigranular or pegmatitic; muscovite leucogranite
- Dsclm: EAST DALHOUSIE (Dsclm); NEW CORNWALL (Dsclm); PANLUKE LAKE (Dsclm); WALDEN (Dsclm); LEUCOMONZOGNANITE; buff, orange, white, pink, red; predominantly fine- to medium-grained, minor coarse-grained; variably porphyritic and equigranular; minor pegmatitic leucomonzogranite; metasedimentary xenoliths rare
- Dsclm: EAST DALHOUSIE LEUCOMONZOGNANITE (Dsclm); buff, orange, pink, red, white; fine-grained, equigranular or slightly megacrystic
- Dsclm: LAKE GEORGE (Dsclm); NEW ROSS (Dsclm); LEUCOMONZOGNANITE; buff, orange, white, pink; predominantly medium- to coarse-grained, minor fine-grained; megacrystic or seriate leucomonzogranite; metasedimentary xenoliths rare
- Dsclm: JOE SIMON (Dsclm); WHALE LAKE (Dsclm); MUSCOVITE-BIOTITE MONZOGNANITE; light to medium grey, minor buff or orange; predominantly medium- to coarse-grained, minor fine-grained; megacrystic or seriate; metasedimentary xenoliths common
- Dsclm: LITTLE ROUND LAKE (Dsclm); SCRAP LAKE (Dsclm); SALMONTAL (Dsclm); BIOTITE MONZOGNANITE; light to medium grey; predominantly medium- to coarse-grained, megacrystic or seriate; metasedimentary xenoliths common to abundant
- Dsclm: LITTLE ROUND LAKE BIOTITE MONZOGNANITE (Dsclm); light to medium grey, fine- to coarse-grained, porphyritic
- Dsclm: SCRAP LAKE BIOTITE MONZOGNANITE (Dsclm); light to medium grey; predominantly medium- to coarse-grained, minor fine-grained; megacrystic or seriate; metasedimentary xenoliths abundant
- Dsclm: BIOTITE PORPHYRY (Dsclm); light, medium or dark grey or brownish grey; predominantly fine- to medium-grained, minor coarse-grained; porphyritic; metasedimentary xenoliths abundant

**EARLY CAMBRIAN TO EARLY ORDOVICIAN**

**HALIFAX GROUP**

- EOH: FELZON FORMATION (EOH); light grey to blue-grey slate, rhythmically interfingered with laminated to thin-bedded, fine-grained metasediments; trace fossils and bioturbated beds common
- LChc: CLUNARD FORMATION (LChc); black to rust-brown slate with thin beds and lenses of minor black metasilstone; medium-bedded, fine-grained, cross-laminated metasediments; sulphid minerals common

**GOLDENVILLE GROUP**

- MCgp: MOSHERS ISLAND FORMATION (MCgp); green to greenish-grey to grey, well laminated metasilstone to slate; minor, very thin- to thin-bedded, fine-grained metasediments; abundant mangiferous nodules, laminations and collicles
- MCgp: GOVERNMENT POINT FORMATION (MCgp); grey, thin- to thick-bedded metasilstone with minor calcite nodules and rare manganese nodules, laminated, green to greyish-green to purple metasilstone and rare black slate; trace fossils common
- ECgp: GREEN HARBOUR FORMATION (ECgp); grey, thick-bedded, medium-grained metasilstone with minor calcite nodules, minor green, cleaved metasilstone and silt; rare trace fossils

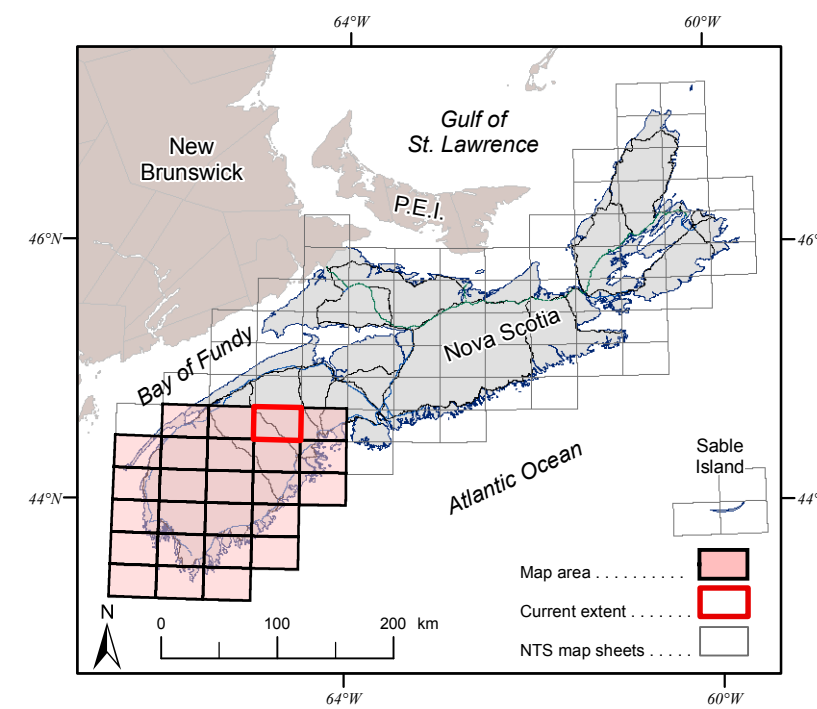
**Symbols\***

- Outcrop, float, Felsenmeer
- Quarry (opening, abandoned)
- Mine (abandoned)
- Shaft
- Fossil
- Drillhole (after Fraser, 2000)
- Mineral occurrence (modified after O'Hilly et al., 2001)
- Radiometric date (Ma) [reference]\*\*
- Bedding: tops known (inclined, vertical, overturned)
- Fold axis: first generation (dip style unknown, in fact, s. fold, z. fold)
- Fold axis: second generation (dip style unknown, in fact, horizontal)
- Fold axis: third generation (dip style unknown)
- Fold axis: unknown generation (dip style unknown, horizontal)
- Cleavage: first generation (inclined, vertical)
- Cleavage: second generation (inclined, vertical)
- Kirk band: first generation, inclined (various)
- Geological contact (assumed, approximate, defined)
- FAUR (assumed, approximate, defined)
- Anticline (assumed, approximate, defined)
- Overturned anticline (assumed, defined)
- Syncline (assumed, approximate, defined)
- Overturned syncline (assumed)
- Shear zone
- Historical gold district (after Fisher, unpublished)
- Area of concentrated drilling
- Rock in water
- Arterial highway
- Trunk highway
- Collector highway
- Hard surface road
- Loose surface/resource access road
- Trail, footpath, cart track
- Railway (active, inactive)
- Coastline
- River, stream
- County boundary
- National Park
- Wetlands
- Lake/ocean

**\* Note:** Completed symbols list for Open File Maps ME 2012-077 to 2012-101. All symbols may not appear on each map.

**\*\* References for Selected Radiometric Age Dates**

[22] Reynolds, P., Zentil, M. and Muecke, G. K. 1981: K-Ar and <sup>40</sup>Ar/<sup>39</sup>Ar geochronology of granitoid rocks from southern Nova Scotia: its bearing on the geological evolution of the Meguma Zone of the Appalachians. *Canadian Journal of Earth Sciences*, v. 18, p. 389-394.



**Descriptive Text**

In 1998 the Nova Scotia Department of Natural Resources initiated a program of geological mapping of the Meguma Terrane of southwestern Nova Scotia. The principal goals of this project are to produce a series of 1:50 000 scale geological bedrock maps of the area, to describe and interpret the sedimentary, igneous, metamorphic and deformational history of the Cambrian to Early Devonian metamorphic rocks, and to evaluate the area's economic potential. This map represents the third in a series of 25 maps highlighting the bedrock geology of southwestern Nova Scotia.

These new maps, combined with stratigraphic, geochemical, geochronological, paleontological and isotopic data (White, 2010; White and Barr, 2010), have highlighted the need to produce a new stratigraphic paradigm together with the 1:50 000 scale geological maps for the Meguma Terrane.

**Disclaimer**

The information on this map may have come from a variety of government and non-government sources. The Nova Scotia Department of Natural Resources does not assume any liability for errors that may occur. This map is intended for use at the published scale of 1:50 000.

**Map Notes**

GIS databases, cartography and reproduction by Angie Ehler, Brian Fisher and Jeff McKeown of the Nova Scotia Department of Natural Resources, Geoscience Information Services Section, 2009-2012. The GIS databases and map were developed using ArcGIS 9.3.

Universal Transverse Mercator Projection (UTM), Zone 20, Central Meridian 63°07' West.

North American Datum (NAD) 1983 Canadian Spatial Reference System (CSRS) 98.

Base and digital data derived from the Nova Scotia Topographic Database (NSTDB), Copyright Her Majesty the Queen in Right of the Province of Nova Scotia. The NSTDB is available from Service Nova Scotia and Municipal Relations (SNMR), Land Information Services Division (LIS), Nova Scotia Geomatics Centre (NSGC), Amherst, Nova Scotia.

Shaded relief image derived from a 25 m Digital Elevation Model of the Province of Nova Scotia, DIP ME 56, version 2, 2006. Azimuth of 0°, sun angle of 45° and a vertical exaggeration of 5.

Nova Scotia Department of Natural Resources  
Mineral Resources Branch

Open File Map ME 2012-079

**Bedrock Geology Map of the  
New Germany Area, NTS Sheet 21A/10,  
Annapolis, Kings, Lunenburg  
and Queens Counties, Nova Scotia**

C. E. White and R. J. Horne

Scale 1:50 000

Harta: Nova Scotia  
2012

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**Recommended Citation**

White, C. E. and Horne, R. J. 2012. Bedrock geology map of the New Germany area, NTS sheet 21A/10, Annapolis, Kings, Lunenburg and Queens Counties, Nova Scotia. Nova Scotia Department of Natural Resources, Mineral Resources Branch, Open File Map ME 2012-079, scale 1:50 000.

**Selected References**

Fisher, B. E. 2008. Nova Scotia drillholes database. Nova Scotia Department of Natural Resources, Digital Product ME 3. [http://www.gov.ns.ca/nal/mdb/download\\_dpd03.asp](http://www.gov.ns.ca/nal/mdb/download_dpd03.asp) [ISBN-185357].

Fisher, B. E., unpublished. Nova Scotia historical gold district boundaries. Nova Scotia Department of Natural Resources, Digital Product ME 304.

MacDonald, M. A. (compiler) 1994. Geological map of the South Mountain Batholith, western Nova Scotia. Nova Scotia Department of Natural Resources, Mines and Energy Branches, Map 94-01, scale 1:250 000. [ISBN-17838].

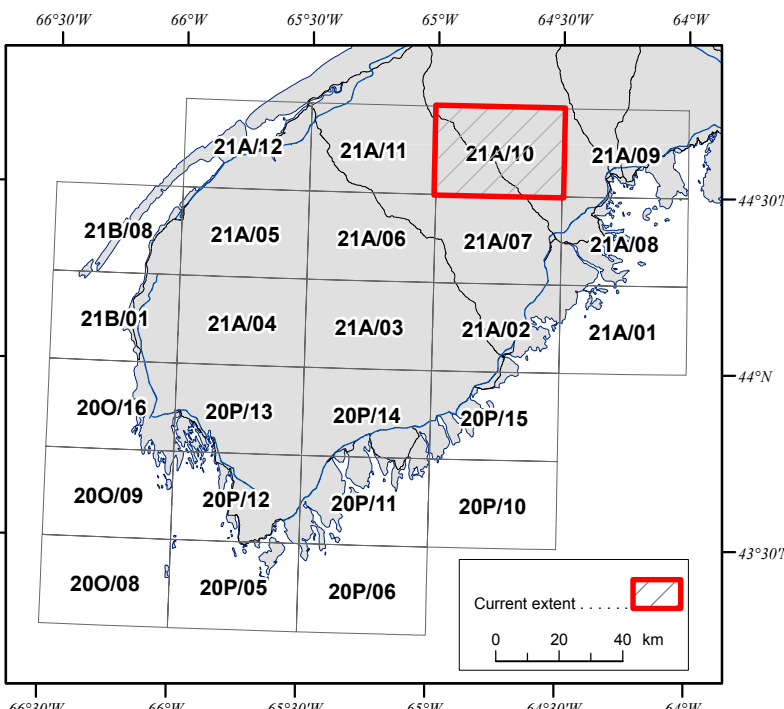
**Selected References (continued)**

O'Reilly, G. A., DeMont, G. J., Fisher, B. E. and Proke, J. C. 2009. Nova Scotia mineral occurrence database. Nova Scotia Department of Natural Resources, Digital Product ME 2. [http://www.gov.ns.ca/nal/mdb/download\\_dpd02.asp](http://www.gov.ns.ca/nal/mdb/download_dpd02.asp) [ISBN-18752].

White, C. E. 2010. Stratigraphy of the lower Paleozoic Goldenville and Halifax groups in southwestern Nova Scotia. *Atlantic Geology*, v. 46, p. 136-154.

White, C. E. and Barr, S. M. 2010. Lithochemistry of the lower Paleozoic Goldenville and Halifax groups, southwestern Nova Scotia, Canada: implications for stratigraphy, provenance, and tectonic setting of the Meguma Terrane, in From Rodinia to Pangaea: the Lithostratigraphic Record of the Appalachian Region, eds. R. P. Toft, M. J. Bartholomew, J. P. Hibbard and P. M. Karabinos, Geological Society of America, Memoir 206, p. 347-366.

† Internal Search Number (ISN) is a unique identifier used in Nova Scotia's Geoscience Maps and Publications Database. The ISN can be used to retrieve a digital version of the listed database. <http://www.gov.ns.ca/nal/mdb/default.asp>



Open File Map ME 2012-079  
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