

LEGEND

MESOZOIC

MIDDLE TO LATE TRIASSIC

WEDGPORT DYKES (Tw) black to brown, fine- to medium-grained lamprophyre and alkaline olivine gabbro

PALEOZOIC

CARBONIFEROUS

TOURNAISIAN

WEDGPORT PLUTON (Cwm) pale grey, medium- to coarse-grained, equigranular to porphyritic biotite monzonite to syenogranite; garnet locally present; fine- to medium-grained, biotite-rich, round granoblastic enclaves common, cut by amphibolite and alkaline olivine gabbro dykes

LATE DEVONIAN

SEAL ISLAND PLUTON (SIP) grey, coarse-grained, inequigranular to porphyritic, biotite monzonite with megacrysts of K-feldspar

LATE ORDOVICIAN TO EARLY DEVONIAN

ROCKVILLE NOTCH GROUP

WHITE ROCK FORMATION

GOVERNMENT BROOK MEMBER (SRwg) grey, biotite (+/- garnet and staurolite) bearing slate, phyllite, schist and metasediments interlayered with green mafic to intermediate lithic metadike and tuffaceous metasediments and amphibolite; rare quartzite

SUNDAY POINT MEMBER (SRws) grey, mafic lithic to lithic crystal metadike and flows, minor pale, felsic crystal metadike and tuffaceous metasediments; rare pillow basalt flows

EARLY CAMBRIAN TO EARLY ORDOVICIAN

HALIFAX GROUP

ACACIA BROOK FORMATION (LCHA) grey to dark grey, laminated slate with minor, thin beds and lenses of light grey metasliltstone; medium-bedded, cross-bedded, fine- to medium-grained metasediments; sulphide minerals common; minor mafic sills

GOLDENVILLE GROUP

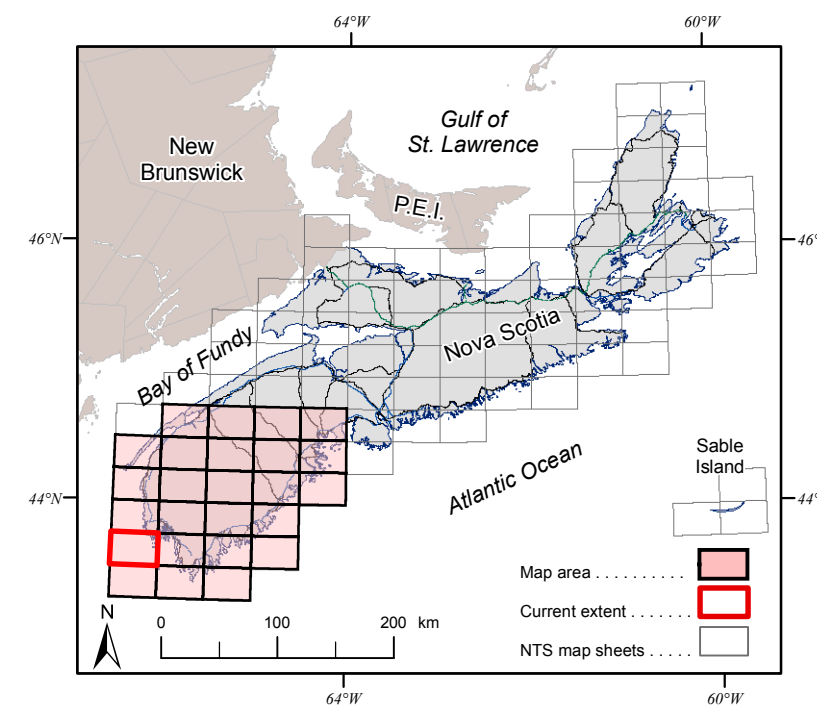
GREEN HARBOUR FORMATION (EGG) grey, thick bedded, medium-grained metasediments with minor calc-silicate nodules; minor green, cleaved metasliltstone and slate; rare trace fossils

MOSES LAKE FORMATION (EEM) grey, thin- to medium-bedded, fine- to medium-grained metasediments with minor calc-silicate nodules interbedded with sulphide-bearing, magnetic slate; minor green, cleaved metasliltstone

Symbols*

Outcrop, Flat, Felsenmeer	Anticline (assumed, approximate, defined)	Overturned anticline (assumed, defined)
Quarry (opening, abandoned)	Overturned anticline (assumed, defined)	Syncline (assumed, approximate, defined)
Mine (assumed)	Overturned anticline (assumed, defined)	Overturned syncline (assumed)
Shaft	Shear zone	Historical gold district (after Fisher, unpublished)
Fossil	Historical gold district (after Fisher, unpublished)	Area of concentrated drilling
Drillhole (after Fisher, 2000)	Mineral occurrence (modified after O'Reilly et al., 2009)	
Mineral occurrence (modified after O'Reilly et al., 2009)	U-Pb zircon, in: muscovite, quartz, detrital zircon, zircon monazite	Rock in water
U-Pb zircon, in: muscovite, quartz, detrital zircon, zircon monazite	U-Pb zircon, in: whole rock	Arterial highway
U-Pb zircon, in: whole rock	⁴⁰ Ar/ ³⁹ Ar, in: biotite, hornblende, muscovite	Trunk highway
⁴⁰ Ar/ ³⁹ Ar, in: biotite, hornblende, muscovite	p, phosphate, in: whole rock	Collector highway
p, phosphate, in: whole rock	²⁰⁷ Pb/ ²⁰⁶ Pb, in: whole rock	Hard surface road
²⁰⁷ Pb/ ²⁰⁶ Pb, in: whole rock	Bedding, tops known (inclined, vertical, overturned)	Loose surface/resource access road
Bedding, tops known (inclined, vertical, overturned)	Bedding, tops unknown (inclined, vertical)	Trail, footpath, cart track
Bedding, tops unknown (inclined, vertical)	Fold axis, first generation (dip style unknown, in fold, steep, folded)	Railway (active, inactive)
Fold axis, first generation (dip style unknown, in fold, steep, folded)	Fold axis, second generation (dip style unknown, in fold, horizontal)	Coastline
Fold axis, second generation (dip style unknown, in fold, horizontal)	Fold axis, third generation (dip style unknown, in fold, horizontal)	River, stream
Fold axis, third generation (dip style unknown, in fold, horizontal)	Fold axis, unknown generation (dip style unknown, horizontal)	County boundary
Fold axis, unknown generation (dip style unknown, horizontal)	Cleavage, first generation (inclined, vertical)	Transmission line (multi, single line)
Cleavage, first generation (inclined, vertical)	Cleavage, second generation (inclined, vertical)	National Park
Cleavage, second generation (inclined, vertical)	Kirk band, first generation, inclined (various)	Wetlands
Kirk band, first generation, inclined (various)	Geological contact (assumed, approximate, defined)	Lake/ocean
Geological contact (assumed, approximate, defined)	FAUR (assumed, approximate, defined)	

* Note: Compiled 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
 [19] Pe-Piper, G. and Reynolds, P. H. 2000. Early Mesozoic alkaline mafic dykes, southwestern Nova Scotia, Canada, and their bearing on Triassic-Jurassic magmatism; The Canadian Mineralogist, v. 38, p. 217-226.



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 nineteenth 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 McKinnon 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°00' 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 50, 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 2012-095

Bedrock Geology Map of the Comeaus Hill Area, NTS Sheet 200/09, Yarmouth County, Nova Scotia

C. E. White

Scale 1:50 000

Map area: 200/09
 Current extent: 200/09
 NTS map sheets: 200/08, 200/10, 200/11, 200/12, 200/13, 200/14, 200/15, 200/16, 200/17, 200/18, 200/19, 200/20, 200/21, 200/22, 200/23, 200/24, 200/25, 200/26, 200/27, 200/28, 200/29, 200/30, 200/31, 200/32, 200/33, 200/34, 200/35, 200/36, 200/37, 200/38, 200/39, 200/40, 200/41, 200/42, 200/43, 200/44, 200/45, 200/46, 200/47, 200/48, 200/49, 200/50, 200/51, 200/52, 200/53, 200/54, 200/55, 200/56, 200/57, 200/58, 200/59, 200/60, 200/61, 200/62, 200/63, 200/64, 200/65, 200/66, 200/67, 200/68, 200/69, 200/70, 200/71, 200/72, 200/73, 200/74, 200/75, 200/76, 200/77, 200/78, 200/79, 200/80, 200/81, 200/82, 200/83, 200/84, 200/85, 200/86, 200/87, 200/88, 200/89, 200/90, 200/91, 200/92, 200/93, 200/94, 200/95, 200/96, 200/97, 200/98, 200/99, 200/100

Map area: 200/09
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Recommended Citation

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Selected References

Fisher, B. E. 2006. Nova Scotia drillholes database. Nova Scotia Department of Natural Resources, Digital Product ME 3. <http://www.gov.ns.ca/nal/mdb/download-qs003.asp> [SN:18535].

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

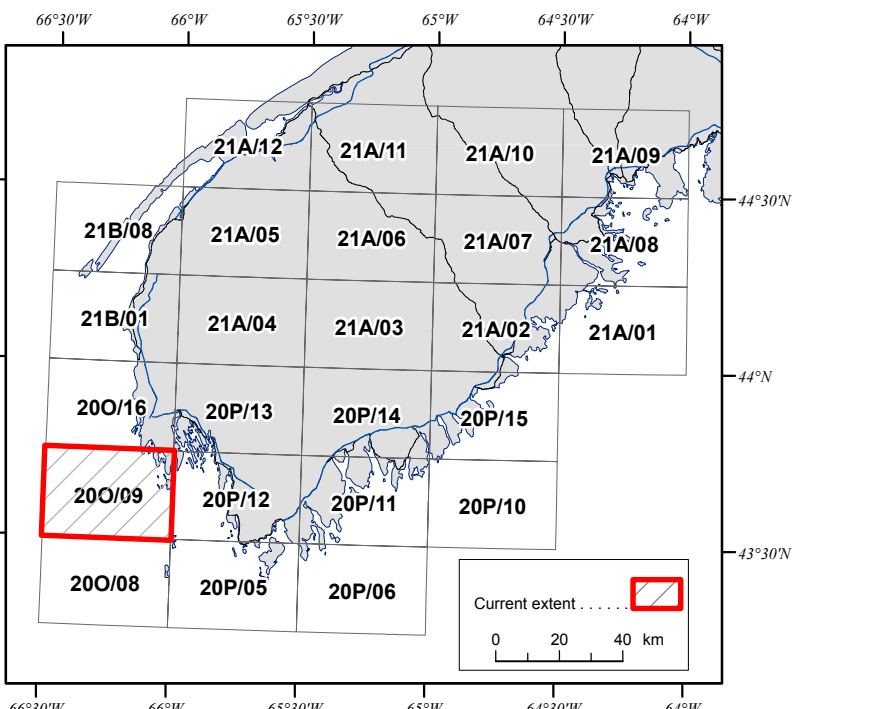
Hwang, S. 1985. Geology and structure of the Yarmouth area, southwestern Nova Scotia, unpublished M.Sc. thesis, Acadia University, Wolfville, Nova Scotia, 237 p.

Selected References (continued)

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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 Lithotectonic 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.



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