



Descriptive Text

This map series shows the extent of the North Mountain Formation, which is a laterally continuous unit of basalt outcropping semi-continuously for about 200 km from Cape Split in the east to Brier Island in the west. The basalt is sandwiched between Triassic age clastic sedimentary rocks of the Blomidon and Scots Bay formations. (Note: The Blomidon Formation is not shown on this map series. See Keppie (2000) for location). The North Mountain Formation consists of three members which are arranged in a conformable, layer-cake stratigraphy dipping gently (2-5°) towards the Bay of Fundy; however, more irregular dips locally occur in the middle member (KFnm) owing to the inflation of individual pahoehoe-type flows during formation. Importantly, zeolites are common in the members and in the case of the middle member (KFnm) pervasive. Full details of previous work, zeolite occurrences and formation and the physical volcanology are found in the selected references given on maps OFM ME 2010-8 to 2010-12.

Map Notes

This is an overview map (scale 1:200 000) for the 5 bedrock geology maps (scale 1:50 000) of the North Mountain Formation, OFM ME 2010-8 to 2010-12.

GIS databases, cartography and reproduction by Angie Ehler, Brian Fisher, John MacNeil and Jeff McKinnon of the Nova Scotia Department of Natural Resources, Geoscience Information Services Section, 2010. 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 (SNSMR), Land Information Services Division (LIS), Nova Scotia Geomatics Centre (NSGC), Amherst, Nova Scotia.

Shaded relief image derived from a 5 m LIDAR bare-earth Digital Elevation Model of the North Mountain area, Nova Scotia, DP ME 455, Version 1, 2010. Azimuth of 315° and sun angle of 45°. Compiled by T. Webster. Composite of several individual surveys dating back to 2000. The Annapolis Valley section of the North Mountain was acquired by the Applied Geomatics Research Group with funding from the Canada Foundation for Innovation (2000, 2003, 2004). The Digby Neck, Long Island and Brier Island sections were acquired by the Applied Geomatics Research Group with funding from the Geological Survey of Canada (Atlantic), Natural Resources Canada (2006).

Disclaimer

The information on this map may have come from a variety of government and nongovernment sources. The Nova Scotia Department of Natural Resources does not assume any liability for errors that may occur. This map is intended for use as an overview map only at the published scale of 1:200 000.

Nova Scotia Department of Natural Resources
Mineral Resources Branch
Open File Map ME 2010-7

Overview Map for the Bedrock Geology Maps of Basaltic Rocks of the North Mountain Formation from Brier Island to Cape Split, Nova Scotia

D.J. Kontak and T.L. Webster

Scale 1:200 000

Halifax, Nova Scotia

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References

Cirilli, S., Marzoli, A., Tanner, L., Bertrand, H., Buratti, N., Jourdan, F., Bellieni, G., Komark, D. and Ravne, P. R. 2009. Latest Triassic onset of the Central Atlantic Magmatic Province (CAMP) volcanism in the Fundy Basin (Nova Scotia): new stratigraphic constraints. Earth and Planetary Science Letters, v. 286, p. 514-525.

Keppie, J. D. (compiler) 2000. Geological map of the Province of Nova Scotia; Nova Scotia Department of Natural Resources, Minerals and Energy Branch, Map ME 2000-1, scale 1:500 000.

Webster, T. L. 2010. Shaded relief image derived from a 5 m LIDAR bare-earth Digital Elevation Model of the North Mountain area, Digby, Annapolis and Kings Counties, Nova Scotia; Nova Scotia Department of Natural Resources, Digital Product ME 455, Version 1: <http://www.gov.ns.ca/natr/mef/download/dp455.asp>

Recommended Citation

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Legend

- MESOZOIC**
- TRIASSIC**
- FUNDY GROUP**
- SCOTS BAY FORMATION (KFsb)
 - NORTH MOUNTAIN FORMATION
 - BRIER ISLAND MEMBER (Upper Flow Unit) (KFbm)
 - MARGARETSVILLE MEMBER (Middle Flow Unit) (KFmm)
 - EAST FERRY MEMBER (Lower Flow Unit) (KFme)

Symbols

- Geological contact
- Fault
- Map series index
- LIDAR survey area (Webster, 2010)
- Arterial highway
- Trunk highway
- Coastline
- County boundary
- Lake/ocean