LATE DEVONIAN, CARBONIFEROUS & MESOZOIC

CRETACEOUS

▨ CHASWOOD FORMATION (Kc): Grey sand(stone); dark grey clay with minor lignite beds

TRIASSIC - JURASSIC

▨ ASHFIELD FORMATION (TJa): Brown to grey amygdaloidal to vesicular basalt (only in the subsurface)

LATE CARBONIFEROUS

PICTOU GROUP

▨ BROAD COVE FORMATION (LCPbc): brick-red sandstone, pebbly sandstone, minor conglomerate

CUMBERLAND GROUP

▨ UNDIVIDED (LCCu): grey and red siltstone, shale, sandstone, limestone and coal

▨ SYDNEY MINES FORMATION (LCCsm): grey and minor red mudstone, siltstone, shale, sandstone, limestone and major coal deposits

▨ GLENGARRY VALLEY FORMATION (LCCgv): green-grey and red sandstone, siltstone and shale with minor thin coal beds

▨ BIG BARREN FORMATION (LCCbb): red polymictic conglomerate, sandstone, and minor grey-green sandstone and mudstone

▨ WADDENS COVE FORMATION (LCCwc): red and grey siltstone, mudstone, sandstone, calcrete, minor coal

▨ SOUTH BAR FORMATION (LCCsb): grey sandstone and pebbly sandstone with minor conglomerate, mudstone and rare coal

▨ INVERNESS FORMATION (LCCi): grey arkosic sandstone, pebbly sandstone and minor conglomerate, grey and red shale, coal

▨ HENRY ISLAND FORMATION (LCChi): grey arkosic sandstone, in part pebbly and conglomeratic, intercalated with red shale and siltstone, and minor coal

▨ PORT HOOD FORMATION (UNDIVIDED) (LCCPHu): fluvial-lacustrine sandstone, shale, siltstone, coal, limestone

- ▨ COLINDALE MEMBER (LCCPH-c): pale grey-brown sandstone, grey shale and siltstone, thin coal seams, shaley limestone
- ▨ MARGAREE MEMBER (LCCPH-m): fine-grained grey-brown sandstone with intercalated red-brown siltstone and shale
- ▨ EMERY BROOK MEMBER (LCCPH-eb): grey siltstone, shale and sandstone; ripple marks abundant

▨ SILVER MINE FORMATION (LCCsmss): grey-green and grey sandstone and siltstone with coaly debris, grey-green and red mudstone and siltstone with rare coal

MIDDLE CARBONIFEROUS

MABOU GROUP

▨ UNDIVIDED (MCMu): polymictic conglomerate with interbedded grey and red siltstone (Isle Madame only: may be partly upper Windsor Group equivalent)

▨ UPPER MABOU GROUP (UNDIVIDED) (MCMuu): red-brown and grey siltstone and sandstone

▨ POMQUET FORMATION (MCMp): red-brown, minor grey siltstone and minor interbedded reddish-grey to grey-green fine-grained sandstone, typically ripple-marked

▨ POINT EDWARD FORMATION (MCMpe): red and minor grey-green variably calcareous siltstone and sandstone, minor limestone

▨ HASTINGS FORMATION (MCMh): grey and dark grey siltstone and shale with buff, thin stromatolitic limestone; minor anhydrite and gypsum in the subsurface; local intervals of red siltstone and sandstone

▨ CAPE DAUPHIN FORMATION (MCMcd): grey shale and siltstone with red shale and minor limestone; rare gypsum and anhydrite

▨ MACKEIGAN LAKE FORMATION (MCMml): grey shale and siltstone with red shale and minor limestone; rare gypsum and anhydrite

▨ LOWER MABOU GROUP (UNDIVIDED) (MCMlu): grey and minor red shale and siltstone and minor limestone; rare gypsum and anhydrite

EARLY CARBONIFEROUS

WINDSOR GROUP

▨ UNDIVIDED (ECWu): siltstone, carbonate rocks, evaporites, typically highly deformed (mainly middle and upper Windsor Group)

UPPER WINDSOR GROUP

▨ HOOD ISLAND FORMATION (ECWhi): red-brown siltstone, intercalated limestone, dolostone and gypsum

▨ WOODBINE ROAD FORMATION (ECWwr): red siltstone, sandstone and conglomerate with interbedded limestone and dolostone; minor gypsum and anhydrite

▨ UIST FORMATION (ECWust): red siltstone and minor conglomerate with intercalated limestone and dolostone; minor gypsum and anhydrite

MIDDLE WINDSOR GROUP

▨ UPPER MIDDLE WINDSOR GROUP (UNDIVIDED) (ECWum): limestone, variably dolomitic and fossiliferous with intercalated gypsum, fine-grained red sandstone and siltstone

▨ LOCH LOMOND FORMATION (ECWll): gypsum and anhydrite with red siltstone, sandstone, conglomerate and thin carbonate beds

▨ ENON FORMATION (ECWe): gypsum, anhydrite, limestone with minor dolostone intercalated with red siltstone, sandstone and conglomerate

▨ MEADOWS ROAD FORMATION (ECWmr): red siltstone, sandstone and congomerate with intercalated gypsum, anhydrite and carbonate

▨ LOWER MIDDLE WINDSOR GROUP (UNDIVIDED) (ECWlm): anhydrite and gypsum, minor laminated carbonate rocks

LOWER WINDSOR GROUP

▨ SYDNEY RIVER FORMATION (ECWsr): anhydrite and gypsum, red congomerate and sandstone, grey silstone and shale with minor interbedded salt and limestone

▨ ISLE MADAME FORMATION (ECWim): limestone

▨ GAYS RIVER FORMATION (ECWgr): limestone, minor dolostone, mainly thin-bedded; local fossiliferous mounds

▨ MACBETH BROOK FORMATION (ECWmb): limestone, in part dolomitic, laminated and/or banded, stromatolitic

▨ CARROLLS CORNER FORMATION (ECWcc): gypsum and anhydrite, with minor interbedded carbonate rocks and rare grey siltstone (overlain by thick halite interval in subsurface)

▨ MACUMBER FORMATION (ECWm): grey and grey-green, laminated pelloidal limestone

PLUTONIC ROCKS

- ▨ ST. PETERS GABBRO (ECsp): black to grey fine- to coarse-grained gabbro; minor basalt
- ▨ HORTON LAKE GABBRO (EChl): black to grey medium- to coarse-grained gabbro; locally fine grained

HORTON GROUP

▨ UNDIVIDED (ECHu): grey and red sandstone, shale, mudstone and conglomerate

UPPER HORTON GROUP

▨ AINSLIE FORMATION (ECHa): grey-green and red-brown sandstone interbedded with red-brown and minor grey siltstone and shale

▨ STEEP CREEK FORMATION (ECHsc): grey polymictic conglomerate, quartz-rich to subarkosic sandstone, grey, grey-green and red siltstone

▨ CALEDONIA MILLS FORMATION (ECHcm): maroon to light grey, massive to well-laminated siltstone, shale and sandstone, with rare polymictic conglomerate

MIDDLE HORTON GROUP

▨ STRATHLORNE FORMATION (ECHs): grey to dark grey siltstone, fine-grained sandstone and shale; minor limestone

- ▨ JUDIQUE FACIES (ECHs-j): tan, brown and reddish-brown sandstone with minor grey shale

▨ TRACADIE ROAD FORMATION (UNDIVIDED) (ECHtru): grey fine- to medium-grained sandstone and conglomerate, dark grey to black laminated siltstone and shale, light grey, fine-grained sandstone and quartz arenite

- ▨ LINCOLNVILLE MEMBER (ECHtr-l): grey and dark grey siltstone, in part highly calcareous, with interbedded quartz-rich sandstone
- ▨ HALFMOON LAKE MEMBER (ECHtr-h): grey sandstone, quartz-rich and in part arkosic with polymictic channel lags and interbeds of dark grey siltstone
- ▨ GRAND GREVE MEMBER (ECHtr-g): grey to black siltstone with grey sandstone and minor polymictic conglomerate; red siltstone intercalated in the upper parts

LOWER HORTON GROUP

▨ CREIGNISH FORMATION (ECHc): grey and greenish-grey sandstone ranging to conglomerate; reddish-brown conglomerate, pebble sandstone and coarse sandstone; abundant gabbroic dykes and sills

- ▨ QUARTZ-RICH FACIES (ECHc-q): pale greyish-red to almost white sandstone, pebbly sandstone and minor conglomerate

CLAM HARBOUR RIVER FORMATION

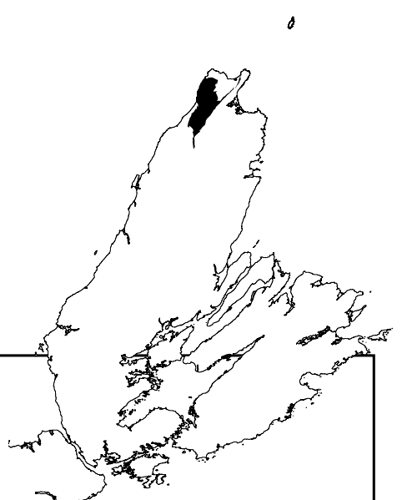
- ▨ GOOSE HARBOUR LAKE MEMBER (ECHch-g): grey-green and pale reddish-grey siltstone with interbeds of fine-grained red and grey sandstone
- ▨ ENGLANDS LAKE MEMBER (ECHch-e): grey to pale reddish-grey sandstone with polymictic conglomerate in beds to 10 m in thickness; interbeds of maroon and grey-green siltstone
- ▨ L'ARDOISE MEMBER (ECHch-l): light grey to white thickly bedded quartz arenite, minor black laminated siltstone and shale, minor polymictic conglomerate

▨ GRANTMIRE FORMATION (ECHg): red conglomerate, sandstone and shale with minor pedogenic limestone; in places may include basal Windsor Group, or may be equiavlent to conglomerate in other formations

LATE DEVONIAN

▨ LOWLAND COVE FORMATION (LDlc): porphyritic rhyolite, sandstone, tuff, conglomerate, amygdaloidal basalt

▨ FISSET BROOK FORMATION - LDfbu: undivided amygdaloidal to vesicular basalt interbedded with grey conglomerate and sandstone; less abundant rhyolite and basaltic lithic tuff; LDfbr: mainly pink to brown flow-banded rhyolite; LDfbb: mainly vesicular and amygdaloidal basalt; LDfbss: sandstone, siltstone, shale, conglomerate



BLAIR RIVER INLIER

SILURIAN

PLUTONIC ROCKS

- ▨ SAMMYS BARREN GRANITE (Ssb): pink, medium-grained quartz-microcline granite
- ▨ RED RAVINE SYENITE (Srr): medium-grained microcline syenite
- ▨ FOX BACK RIDGE DIORITE (Sfb): hornblende-porprhyritic diorite and granodiorite

MESOPROTEROZOIC-PALEOZOIC

▨ MEAT COVE MARBLE (mPPmc): marble, calc-silicate rocks

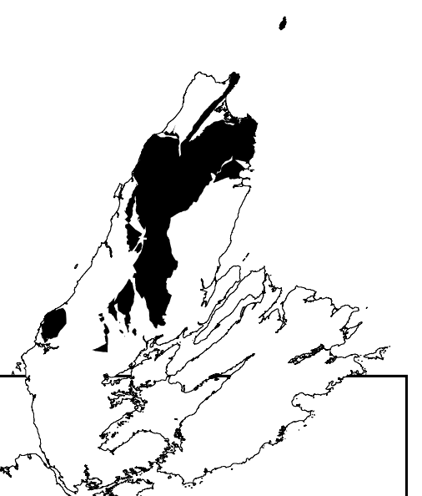
▨ BLAIR RIVER INLIER MYLONITE (mPPbr): varied mylonitic rocks

MESOPROTEROZOIC

PLUTONIC ROCKS

- ▨ OTTER BROOK GNEISS (mPob): medium- to coarse-grained biotite-garnet granitoid gneiss
- ▨ UPPER GRAYS HOLLOW BROOK CHARNOCKITE (mPug): massive and layered granitoid rocks with orthopyroxene and clinopyroxene
- ▨ LOWLAND BROOK SYENITE (mPlb): red, coarse-grained syenite; varies from massive pyroxene-bearing syenite to gneissic hornblende-bearing syenite
- ▨ HIGH CAPES ANORTHOSITE (mPhc): anorthosite
- ▨ RED RIVER ANORTHOSITE SUITE (mPrr): white, buff or pink anorthosite; coarse-grained leucogabbro; interlayered gabbro, leucogabbro and anorthosite with pyroxene-apatite-ilmenite dykes and layers
- ▨ DELANEYS BROOK ANORTHOSITE (mPdb): mainly massive white anorthosite
- ▨ SALMON RIVER ANORTHOSITE (mPsr): deformed and altered anorthosite
- ▨ SAILOR BROOK GNEISS (mPsb): tonalitic to dioritic gneiss, granitic gneiss; locally layered mafic gneiss and granulite

▨ POLLETTS COVE RIVER GNEISS (mPpc): semipelitic and psammitic gneiss amphibolite, granitoid gneiss, calc-silicate schist



ASPY TERRANE

EARLY CARBONIFEROUS OR OLDER

▨ HIGHLANDS MYLONITE (ECh): fine-grained mylonitic rocks of uncertain protolith

LATE DEVONIAN

PLUTONIC ROCKS (in alphabetical order)

- ▨ ANDREWS MOUNTAIN GRANITE (LDam): red coarse-grained syenogranite
- ▨ BLACK BROOK GRANITIC SUITE (LDbbgs): pale pink to grey, fine- to medium-grained biotite granite gradational to granodiorite, locally muscovite-bearing; variably foliated; abundant aplite and pegmatite dykes
- ▨ BOTHAN BROOK PLUTON (LDbbmg): medium- to coarse-grained equigranular pink monzogranite to syenogranite (may include Boundary Line Intrusive Suite of Horne, 1996)
- ▨ FRENCH MOUNTAIN SYENOGRANITE (LDfm): red, fine- to medium-grained equigranular syenogranite
- ▨ GILLANDERS MOUNTAIN PLUTON - LDgmgb: grey to black fine- to coarse-grained gabbro; LDgmmg: pink to grey medium- to coarse-grained biotite monzogranite; LDgmsg: red, fine- to medium-grained equigranular to granophyric porphyritic syenogranite
- ▨ GRANDE ANSE GRANITE (LDgag): pink fine- to medium-grained foliated biotite granite
- ▨ MARGAREE PLUTON (LDmag): red to pink, coarse-grained to megacrystic, alkali-feldspar granite; commonly has K-feldpsar rimmed by plagioclase
- ▨ PARK SPUR GRANITE (LDps): pale pink to grey, medium- to fine-grained, foliated muscovite-biotite granite
- ▨ PETERS BROOK PLUTON (LDpb): pink, medium-grained equigranular monzogranite
- ▨ PLEASANT BAY PLUTON (LDpbg): white to grey, medium-grained biotite-muscovite granite to granitic gneiss
- ▨ PORT BAN DIORITE (LDpbd): dark grey to black and white, medium- to coarse-grained diorite to quartz diorite, locally foliated
- ▨ SALMON POOL GRANITE (LDsp): red to pink, medium-grained biotite granite mingled with gabbro and diorite.
- ▨ SUGARLOAF GRANITE - LDslmg: pink to grey, medium- to coarse-grained biotite monzogranite; LDslmbmg: muscovite-biotite monzogranite
- ▨ WEST BRANCH NORTH RIVER GRANITE (LDwb): medium- to coarse-grained equigranular monzogranite to syenogranite; also includes medium- to coarse-grained grey megacrystic granodiorite
- ▨ WILKIE SUGARLOAF GRANITE (LDws): pink to red coarse-grained monzogranite, locally sheared and cataclased

▨ MACMILLAN MOUNTAIN VOLCANIC SUITE (LDmm): rhyolite, felsic pyroclastic rocks, siltstone, quartz pebble conglomerate, mafic to intermediate flows

MIDDLE DEVONIAN

PLUTONIC ROCKS (in alphabetical order)

- ▨ CAMERON BROOK GRANODIORITE (MDcb): pink coarse-grained variably megacrystic biotite granodiorite
- ▨ NEILS HARBOUR ORTHOGNEISS (MDnh): granodioritic orthogneiss with K-feldspar augen; screens of biotite schist

EARLY DEVONIAN

PLUTONIC ROCKS

- ▨ LEONARD MACLEOD BROOK PLUTONIC SUITE (EDlm): pink, fine-grained granitic rocks, ranging from alkali-feldspar granite to tonalite

SILURIAN-DEVONIAN

PLUTONIC ROCKS (in alphabetical order)

- ▨ EASACH BAN COMPLEX (SDeb): grey to black, medium-grained diorite and gabbro with porphyritic and aphyric dykes
- ▨ GEORGE BROOK AMPHIBOLITE (SDgbam): dark green, coarse-grained amphibolite with relict dioritic and gabbroic textures
- ▨ GILLIS BROOK DIORITE (SDgb): fine- to medium-grained diorite to tonalite
- ▨ GULCH BROOK GRANITE (SDgbg): fine- to medium-grained muscovite-biotite monzogranite; typically foliated
- ▨ LAKE AINSLIE PLUTON - SDlad: grey to black dioritic rocks; SDlag: grey to pink medium-grained granite

SILURIAN

▨ INGONISH ISLAND RHYOLITE (Sii): Black to grey flow-banded rhyolite, locally porphyritic or spherulitic; minor interlayered lithic tuff

PLUTONIC ROCKS (in alphabetical order)

- ▨ CAPE NORTH PLUTON (Scn): fine- to medium-grained biotite monzogranite; typically foliated
- ▨ GLASGOW BROOK PLUTON (Sgb): strongly foliated medium- to coarse-grained hornblende-biotite tonalitic to granodioritic orthogneiss
- ▨ GRAND FALAISE ALKALI-FELDSPAR GRANITE (Sgf): pink to red, medium- to coarse-grained, inequigranular alkali-feldspar granite
- ▨ LAVIS BROOK DIORITE (Slb): grey to red-grey, medium- to coarse-grained, equigranular to porphyritic diorite to quartz diorite
- ▨ MACLEAN BROOK GRANODIORITE (Smbgd): red, medium- to coarse-grained, subporphyritic granodiorite
- ▨ MIDDLE ASPY RIVER ORTHOGNEISS (Sma): fine- to medium-grained biotite granodioritic orthogneisss
- ▨ TAYLORS BARREN PLUTON (Stb): pink to red, medium- to coarse-grained variably foliated augen monzogranite to syenogranite

CHÉTICAMP LAKE GNEISS

▨ SCLpg: semipelitic paragneiss, quartzofeldspathic orthogneiss; SCLgn: pelitic gneiss

▨ MCDONALD GLEN BROOK FORMATION (Smg): quartz-feldspar crystal tuff, lithic tuff, andesite, basalt, red siltstone and arenite, rhyolite and felsic tuff

▨ MACKINNONS BROOK TRAIL FORMATION (Smb): black and red shale, siltstone, quartz arenite and dolomitic limestone

▨ SARACH BROOK METAMORPHIC SUITE (Ssbms): felsic-intermediate flows and pyroclastic rocks, minor slate, conglomerate

ORDOVICIAN-SILURIAN

▨ CLYBURN BROOK FORMATION (OScb): metamorphosed felsic and mafic volcanic and volcaniclastic rocks, slate, phyllite, psammite

MONEY POINT GROUP

▨ UNDIVIDED (OSMPu): pelitic, semipelitic and psammitic schist, metaconglomerate, mafic to felsic volcanic and pyroclastic schist, metarhyolite

▨ GULCH BROOK FORMATION (OSMPgb): pelitic, semipelitic and psammitic schist, metaconglomerate

▨ SHAG ROOST FORMATION - OSMPsrv: mafic to felsic volcanic and pyroclastic schist; OSMPsrr: metarhyolite

▨ MIDDLE RIVER METAMORPHIC SUITE (OSmr): medium- to high-grade metasedimentary rocks including psammite, biotite-garnet-kyanite schist, amphibolite, marble; abundant pegmatite

▨ MACRAE BROOK FORMATION (OSmb): interbedded volcanic and sedimentary rocks

PLUTONIC ROCKS

PLEASANT BAY COMPLEX

- ▨ BELLE CÔTE ROAD ORTHOGNEISS (OSPBbc): light grey homogeneous quartz-feldspar-biotite +/- garnet orthogneiss; minor amphibolite and minor paragneiss
- ▨ MACKENZIES MOUNTAIN ORTHOGNEISS (OSPBmm): megacrystic orthogneiss
- ▨ FIRST FORK BROOK GNEISS (OSPBff): banded mafic quartz-feldspar-biotite-hornblende+/- garnet gneiss, amphibolite, minor pelitic gneiss and granitic orthogneiss

CAMBRIAN

- ▨ UPPER FISSET BROOK QUARTZ DIORITE (Єuf): grey to red-grey, medium- to coarse-grained, equigranular to porphyritic diorite to quartz diorite and tonalite
- ▨ CHÉTICAMP RIVER TONALITE (Єcr): grey to red-grey, fine- to medium-grained, equigranular tonalite to granodiorite

JUMPING BROOK METAMORPHIC SUITE

▨ UNDIVIDED (ЄJBu): low- to medium-grade pelitic to psammitic schist, metavolcanic rocks, amphibolite

▨ ROCKY BROOK FORMATION (ЄJBrb): grey to silver, coarse-grained phyllitic arkosic sandstone and cobble to boulder conglomerate

▨ CORNEY BROOK FORMATION (ЄJBcb): silver to light grey, staurolite-garnet-kyanite-bearing schist; gradational to Dauphinee Brook Formation

▨ DAUPHINEE BROOK FORMATION (ЄJBdb): dark grey slate and thinly to thickly bedded phyllitic arkosic sandstone, conglomerate, thinly bedded white quartzite; minor phyllitic felsic crystal to crystal lithic tuff

▨ BARREN BROOK FORMATION (ЄJBbb): pale grey schistose arkosic sandstone and conglomerate; minor felsic crystal tuff

▨ FARIBAULT BROOK FORMATION (ЄJBfb): dark green, fine-grained phyllitic mafic tuff and basalt flows and synchronous mafic sills/dykes, minor quartz-muscovite schist

▨ FISHING COVE RIVER FORMATION (ЄJBfc): silver to light grey, garnet-kyanite-bearing schist and gneiss

NEOPROTEROZOIC-SILURIAN

CAPE NORTH GROUP

▨ UNDIVIDED (nPSCNu): semipelitic, pelitic and calcsilicate gneiss, minor marble and amphibolite

▨ SPARLINGS FORMATION (nPSCNsf): pelitic gneiss

▨ MACGREGOR BROOK FORMATION - nPSCNmbm: marble and calc-silicate gneiss; nPSCNmbq: quartz-feldspar-biotite-hornblende gneiss

GILLANDERS MOUNTAIN METAMORPHIC SUITE

▨ UNDIVIDED (nPSGMu): semi-pelitic schist, quartzofeldspathic gneiss

▨ EGYPT MOUNTAIN ROAD FORMATION (nPSGMem): psammitic to pelitic schist, metabasite, minor quartzofeldspathic augen gneiss

▨ SALT BROOK FORMATION: (nPSGMsb): massive to foliated amphibolite, garnetiferous semipelitic schist, minor graphic schist

NEOPROTEROZOIC

▨ STEWART BROOK FORMATION (nPsb): pale grey to grey to pale green, spotted metasiltstone to phyllitic quartzo-feldspathic sandstone; white quartzite; quartzo-feldspathic schist and gneiss

- ▨ PEMBROKE LAKE MONZOGRANITE (nPpl): medium- to coarse-grained, equigranular to locally megacrystic, muscovite-biotite-bearing monzogranite
- ▨ FARM BROOK GRANODIORITE (nPfb): pink, medium- to coarse-grained, inequigranular to locally megacrystic, granodiorite to monzogranite
- ▨ RIGWASH BROOK GRANODIORITE (nPrb): pink, medium- to coarse-grained, inequigranular to locally megacrystic, granodiorite to monzogranite

MCAULAY BROOK GROUP

▨ MACLELLAN BROOK GNEISSIC COMPLEX (nPMBmb): quartzofeldspathic and amphibolitic gneiss and minor marble intruded by sheets and dykes of diorite, granodiorite, granite, aplite and pegmatitie

▨ UPPER MCAULAY BROOK FORMATION (nPMBum): dark green to grey-green mafic schist and phyllite, pink and brown quartzofeldspathic schist (metarhyolite?)

▨ SOUTH CAPE HIGHLANDS FORMATION (nPMBsc): mafic phyllite and schist

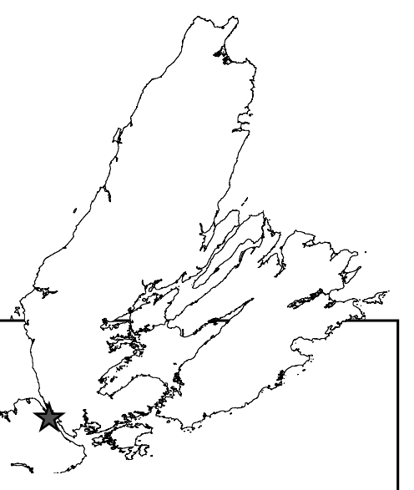
- ▨ MABOU HIGHLANDS LEUCOTONALITE (nPmh): grey to grey-green, coarse-grained leucotonalite; typically sheared

SIGHT POINT GROUP

▨ SIGHT POINT FORMATION (nPSPsp): grey-green schist with volcanic clasts interlayered with grey fine-grained schist

▨ STEWARTS BROOK FORMATION (nPSPsb): dark grey-green fine-grained mafic schist and dark green medium-grained amphibolite

▨ GLENORA BROOK FORMATION (nPSPgb): grey-green chloritic phyllite and mica schist



CAPE PORCUPINE COMPLEX

ORDOVICIAN

▨ ALKALI-FELDSPAR GRANITE/SYENOGRANITE (OCPafg): foliated to mylonitic alkali-feldspar granite to syenogranite

▨ QUARTZ ALKALI-FELDSPAR LEUCOSYENITE (OCPaf): red, fine- to medium-grained quartz alkali-feldspar leucosyenite; typically highly magnetic

▨ ALKALI-FELDSPAR SYENITE TO QUARTZ ALKALI-FELDSPAR SYENITE (OCPafs): red, medium- to coarse-grained alkali-feldspar syenite to quartz alkali-feldspar syenite; highly magnetic

EDIACARAN-ORDOVICIAN

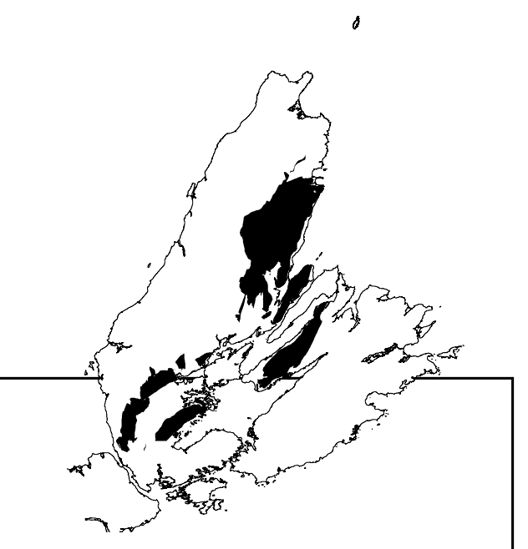
▨ METARHYOLITE (ɆOCPmr): grey to dark grey, rhyolitic crystal to crystal lithic lapilli tuff; mainly mylonitic

▨ METASILTSTONE (ɆOCPms): grey to black, fine-grained and strongly foliated and lineated metasiltstone, locally with thin, light grey, fine-grained metasandstone lenses; rare grey, fine-grained quartzite

▨ LEUCODIORITE (ɆOCPld): white to light grey, medium- to coarse-grained inequigranular leucodiorite

EDIACARAN

▨ SYENOGRANITE TO MONZOGRANITE (ɆCPmg): pink to red coarse-grained equigranular to medium-grained porphyritic monzogranite gradational to syenogranite with abundant enclaves of mafic plutonic rocks and andesitic to rhyolitic metavolcanic rocks; cut by abundant mafic dykes



BRAS D'OR TERRANE

LATE DEVONIAN

▨ BROWN BROOK FORMATION (LDbb): strongly cleaved, maroon siltstone and fine-grained sandstone with tuffaceous sandstone, felsic to mafic lithic tuff and rare rhyolite

DEVONIAN

PLUTONIC ROCKS (in alphabetical order)

- ▨ HIGHLANDS MICRODIORITE (Dh): grey fine-grained diorite, occurring as dykes
- ▨ WHYCOCOMAGH MOUNTAIN PLUTON (Dw): porphyritic granite with phenocrysts of plagioclase and hornblende

SILURIAN-DEVONIAN?

- ▨ MCASKILL BROOK GABBRO (SDmb): fine- to medium-grained, locally porphyritic hornblende gabbro

ORDOVICIAN

▨ MCLEOD BROOK FORMATION (Omb): light grey to black shale, rusty weathering

MIDDLE-LATE CAMBRIAN

- ▨ CAPE SMOKEY GRANITE (MLЄcs): pink to red, medium- to coarse-grained leucomonzogranite
- ▨ KELLYS MOUNTAIN GRANITE - MLЄkmmg: pink to grey, medium- to coarse-grained biotite monzogranite; MLЄkmlm: pink to red, medium- to coarse-grained leucomonzogranite
- ▨ MORRISON BROOK QUARTZ MONZONITE (MLЄmb): dark grey to pinkish-grey, biotite-hornblende quartz monzonite
- ▨ MOUNT CAMERON SYENOGRANITE (MLЄmc): pink to red syenogranite with quartz and feldspar microphenocrysts in a granophyric groundmass
- ▨ ST. ANNS LEUCOGRANITE (MLЄsa): pink to red, medium- to coarse-grained leucomonzogranite

▨ MACNEIL FORMATION (MLЄm): dark grey to black shale, siltstone and limestone

▨ MACMULLIN FORMATION (MLЄmst): interbedded micaceous siltstone, sandstone and shale, locally with carbonate nodules

BOURINOT GROUP

▨ UNDIVIDED (MLЄBGu): basalt, rhyolite, tuff, quartz arenite, siltstone, shale

▨ GREGWA FORMATION (MLЄBGg): orange to orange-brown and green siliceous lithic tuff, dark green to grey mafic lithic tuff, grey to black tuffaceous sandstone, rare green and grey siltstone, rusty weathering shale, chert and volcanogenic conglomerate

▨ DUGALD FORMATION (MLЄBGd): interbedded brown to maroon and grey to green siltstone, green and red shaley siltstone, fine-grained sandstone, arkosic to feldspathic wacke, white quartz arenite, conglomerate

▨ ESKASONI FORMATION (MLЄBGe): interlayered amygdaloidal basalt and rhyolite, minor felsic lapilli tuff, local boulder conglomerate with mainly volcanic clasts

EDIACARAN

PLUTONIC ROCKS (in alphabetical order)

- ▨ ADELAIDE BROOK LEUCOTONALITE (Ɇab): medium- to coarse-grained leucotonalite
- ▨ BADDECK RIVER GRANODIORITE (Ɇbr): grey to white, medium-grained muscovite-biotite granodiorite; weakly foliated
- ▨ BEINN BHREAGH GRANODIORITE (Ɇbb): varied granitoid rocks including diorite, hornblende-biotite granodiorite and coarse-grained biotite monzogranite
- ▨ BIG BROOK GRANODIORITE (Ɇbbgd): medium-grained, equigranular, hornblende-biotite granodiorite to tonalite
- ▨ BIG HILL GRANODIORITE (Ɇbh): white to grey medium-grained biotite granodiorite
- ▨ BIRCH PLAIN GRANITE (Ɇbp): pink to red medium-grained biotite monzogranite; locally foliated
- ▨ BOISDALE HILLS PLUTON - Ɇbhlg: pink medium- to coarse-grained leucosyenogranite; Ɇbhmg: heterogeneous fine-grained microgranite, locally with dyklets of red syenogranite; Ɇbhgd: pink to red medium-grained biotite granodiorite; Ɇbhbh: grey medium-grained biotite-hornblende granodiorite; Ɇbhhgd: white to red coarse-grained hornblende granodiorite, typically cataclastic or sheared, locally abundant xenoliths; Ɇbhd: dark grey to grey fine- to medium-grained diorite and quartz diorite, locally brecciated by leucodiorite and granodiorite
- ▨ BUCKLAW PLUTON (Ɇb): medium-grained granodiorite with muscovite and biotite
- ▨ CREIGNISH HILLS PLUTON - Ɇchfm: fine-grained and locally porphyritic biotite monzogranite with phenocrysts of plagioclase and quartz; Ɇchmg: coarse-grained, equigranular to slightly porphyritic biotite to biotite-hornblende monzogranite; Ɇchg: fine- to medium-grained, inequigranular, weakly foliated granodiorite and monzogranite; Ɇcht: fine- to medium-grained, locally porphyritic tonalite gradational to quartz diorite and diorite
- ▨ CROSS MOUNTAIN GRANITE (Ɇcm): grey to white, fine- to medium-grained muscovite-biotite granodiorite, granite and tonalite; weakly foliated
- ▨ GISBORNE FLOWAGE QUARTZ DIORITE (Ɇgf): grey, medium-grained biotite-rich quartz diorite with amphibolitic lenses and abundant dykes and small bodies of medium-grained granodiorite and granitic pegmatite
- ▨ GOOSE COVE BROOK GRANODIORITE (Ɇgc): grey to pink medium-grained granodiorite gradational to granite, locally with microcline megacrysts
- ▨ GRASS COVE PLUTON (Ɇgcgd): medium- to coarse-grained hornblende-biotite granodiorite to tonalite with aplite dykes
- ▨ HIGHLANDS GRANITOID ROCKS (Ɇh): varied granitoid rocks of uncertain age
- ▨ INDIAN BROOK GRANODIORITE (Ɇib): pink to red medium-grained biotite-hornblende granodiorite
- ▨ INGONISH RIVER TONALITE (Ɇir): dark grey to light grey, medium- to coarse-grained tonalite with magmatic epidote; variably foliated
- ▨ KATHY ROAD DIORITIC SUITE (Ɇkr): fine- to coarse-grained black and white dioritic rocks; vary from equigranular to strongly lineated/foliated to gneissic; include diorite, quartz diorite, tonalite and hornblendite
- ▨ KELLYS MOUNTAIN DIORITE (Ɇkm): fine- to coarse-grained locally poprhyritic dioritic rocks; mainly quartz diorite; varies to gabbro, tonalite, quartz monzodiorite, granodiorite, quartz monzonite and hornblendite
- ▨ KERRS BROOK GRANITE/GRANODIORITE (Ɇkb): pink to red medium-grained biotite-hornblende granodiorite gradational to granite
- ▨ LEWIS MOUNTAIN PLUTON - Ɇlmd: medium-grained hornblende-biotite diorite; Ɇlmt: medium-grained hornblende-biotite diorite, tonalite and quartz diorite; Ɇlmmg: medium-grained hornblende-biotite monzogranite
- ▨ MARBLE MOUNTAIN PLUTON - Ɇmmgd: medium- to coarse-grained, locally porphyritic hornblende-biotite granodiorite to tonalite; Ɇmmbgd: medium- to coarse-grained, locally porphyritic biotite granodiorite to tonalite
- ▨ MIDDLE HEAD LEUCODIORITE (Ɇmh): grey medium- to coarse-grained leucodiorite
- ▨ MILL BROOK QUARTZ DIORITE (Ɇmb): medium- to coarse-grained, inequigranular quartz diorite to tonalite
- ▨ MURRAY BROOK GRANODIORITE (Ɇmbgd): pink to red medium-grained biotite-hornblende granodiorite
- ▨ MURRAY MOUNTAIN QUARTZ MONZODIORITE (Ɇmm): dark grey to pinkish-grey, fine- to medium-grained porphyritic to inequigranular biotite-hornblende quartz monzodiorite
- ▨ NEW GLEN GRANITE (Ɇng): grey to white medium-grained biotite granodiorite with pink microcline phenocrysts; weakly foliated
- ▨ NORTH BRANCH BADDECK RIVER LEUCOTONALITE (Ɇnb): white to grey, medium- to coarse-grained leucotonalite to tonalite; mainly cataclastic to mylonitic; abundant mafic dykes
- ▨ RIVER DENYS TONALITE (Ɇrd): fine- to medium-grained, locally porphyritic tonalite gradational to quartz diorite and diorite
- ▨ ROPER BROOK AMPHIBOLITE (Ɇrb): amphibolite
- ▨ SHUNACADIE PLUTON - Ɇslg: pink coarse-grained leucogranite; Ɇsmg: pink medium-grained biotite monzogranite; Ɇsgd: pink medium-grained biotite granodiorite; Ɇsd: grey fine- to medium-grained diorite to quartz diorite and quartz monzodiorite
- ▨ SKI HILL GRANODIORITE (Ɇsh): light grey to pinkish-grey, medium- to coarse-grained biotite-hornblende granodiorite
- ▨ SKYE MOUNTAIN QUARTZ DIORITE (Ɇsmgd): medium- to coarse-grained, inequigranular diorite to quartz diorite
- ▨ SNAKE CAT LAKE GRANODIORITE (Ɇsc): grey to white medium-grained biotite granodiorite with glomeroporphyritic quartz; weakly foliated
- ▨ TIMBER LAKE DIORITIC SUITE (Ɇtl): grey to black medium-grained quartz diorite to diorite; weakly foliated
- ▨ WASHABUCK PLUTON (Ɇw): medium-grained diorite to hornblende-biotite granodiorite with minor coarse-grained hornblendite
- ▨ WEST BAY PLUTON (Ɇwb): coarse-grained, equigranular to slightly porphyritic biotite-hornblende monzogranite
- ▨ WRECK COVE DIORITIC SUITE (Ɇwc): dark grey fine- to medium- to coarse-grained quartz diorite varying to diorite and granodiorite; equigranular to porphyritic to pegmatitic; foliated in places

NEOPROTEROZOIC

▨ PRICE POINT FORMATION (nPpp): dacitic-andesitic crystal and lithic-crystal tuffs and less abundant flows

▨ INGONISH BEACH GNEISS (nPib): tonalitic and granitic gneiss; minor semipelitic gneiss

GEORGE RIVER METAMORPHIC SUITE (in alphabetical order)

▨ ABERDEEN RIDGE FORMATION (nPGRar): quartzite and minor amphibolite

▨ BARACHOIS RIVER FORMATION (nPGRbr): potassium feldspar augen gneiss, psammite, amphibolite, schist, phyllite, biotite metasiltstone

▨ BENACADIE BROOK FORMATION (nPGRbb): low-medium metamorphic grade pelitic, semipelitic and psammitic schist

▨ BLUES BROOK FORMATION - nPGRbbu: undivided carbonate rocks, metasandstone, metasilstone, slate; nPGRbbsl: mainly slate interbedded with minor metasandstone, metasiltstone and carbonate rocks; nPGRbbm: mainly carbonate rocks interbedded with minor metasandstone, metasiltstone, slate and quartzite; nPGRbbq: mainly quartzite interbedded with minor carbonate rocks; nPGRbbv: mainly andesitic to basaltic lithic and lithic crystal tuff, minor basalt flows; nPGRbbst: mainly metasandstone and metasiltstone interbedded with minor slate, carbonate rocks, quartzite and rare basaltic lithic tuff; nPGRbbp: pelitic schist interbedded with subordinate marble, amphibolite and quartzite; nPGRbbqf: quartzo-feldspathic schist with quartzite, metaconglomerate and minor amphibolite

▨ GLEN TOSH FORMATION (nPGRgt): pelitic and semi-pelitic metasedimentary rocks

▨ MALAGAWATCH FORMATION (nPGRm): metasiltstone, slate, calcitic and dolomitic carbonate-bearing rocks, minor quartzite and basaltic metavolcanic rocks

▨ MASKELLS HARBOUR FORMATION (nPGRmh): quartzofeldspathic metasandstone, metasilstone, quartzite, marble

▨ MCMILLAN FLOWAGE FORMATION - nPGRmfuc: upper clastic member: semipelitic schist, psammite, amphibolite; nPGRmfm: marble member: marble and quartzite; nPGRmfmc: middle clastic member: semipelitic, pelitic and mafic schist, amphibolite, quartzite; nPGRmfq: quartzite member: massive quartzite, minor phyllite and schist; nPGRmflc: lower clastic member: semipelitic and pelitic schist and phyllite, amphibolite, mafic phyllite

BRAS D'OR GNEISS (in alphabetical order)

▨ FRENCHVALE ROAD METAMORPHIC SUITE (nPBDfv): low pressure, amphibolite facies gneiss, marble, quartzite, amphibolite

▨ KELLYS MOUNTAIN GNEISS (nPBDkm): grey medium- to coarse-grained cordierite-bearing migmatitic paragneiss; amphibolite sheets

▨ LIME HILL GNEISSIC COMPLEX (nPBDlh): biotite, biotite-cordierite, and sillimanite-bearing paragneiss, migmatitic paragneiss, marble, quartzite, amphibolite and minor tonalitic orthogneiss

▨ MELFORD FORMATION (nPBDm): biotite, biotite-cordierite, sillimanite and garnet-bearing schist, marble, quartzite and granitic orthogneiss

▨ SKYE MOUNTAIN METAMORPHIC SUITE (nPBDsm): biotite-, biotite-cordierite, and sillimanite-bearing paragneiss, migmatitic paragneiss, marble, quartzite, amphibolite and minor tonalitic orthogneiss

Notes

This illustration is the detailed bedrock geology legend for the Cape Breton Island bedrock compilation project, 2017. It is to be used in conjunction with the Cape Breton Bedrock Mapping series DP ME 433 and corresponding published maps OFM ME 2017-006 to OFM ME 2016-031. The 352 map units are arranged on the legend in six assemblages (columns) based on age and/or terrane.

A complete source list used in compilation of the legend is available in OFR ME 2017-002. Unit names and ages were taken mainly from the source references, with no attempt to reconcile that information across Cape Breton Island, to remove duplicate names, or to re-interpret areas of geological inconsistencies that are not the work of the compilers.

The information on this illustration 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. The legend was compiled by S. M. Barr (Acadia University) and C. E. White (NSDNR). Illustration by A. L. Barras of the Nova Scotia Department of Natural Resources, Geoscience Information Services Section, 2017. The illustration was developed using ArcGIS® 10.2.2 and CorelDRAW® X7.

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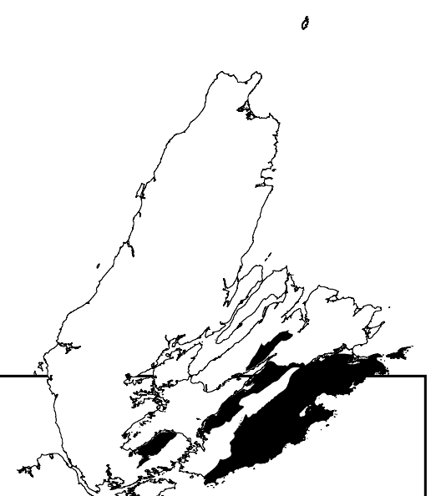
Selected References

For a complete list of references please refer to Open File Report ME 2017-002.

Barr, S. M. and White, C. E. 2017: List of compilation sources for bedrock geology maps of Cape Breton Island, Nova Scotia (Open File Maps ME 2017-006 to 2017-031); Nova Scotia Department of Natural Resources, Open File Report ME 2017-002, 7 p.



MIRA TERRANE

MIDDLE DEVONIAN

PLUTONIC ROCKS (in alphabetical order)

- ▨ DEEP COVE PLUTON (MDdc): biotite monzogranite
- ▨ GILLIS MOUNTAIN PLUTON (MDgm): porphyritic monzogranite, equigranular monzogranite, quartz monzodiorite
- ▨ LOWER ST. ESPRIT PLUTON (MDls): hornblende-biotite monzogranite
- ▨ MCADAM LAKE QUARTZ SYENITE (MDml): red to red-brown fine- to coarse-grained quartz syenite
- ▨ MILLERS BROOK PLUTON (MDmb): grey monzodiorite
- ▨ PETIT-DE-GRAT PLUTON (MDpg): fine- to coarse-grained, equigranular pink syenogranite in small intrusive bodies and dykes
- ▨ SALMON RIVER RHYOLITE PORPHYRY (MDsr): pink rhyolite porphyry to fine-grained monzogranite

▨ CHEDABUCTO FAULT COMPLEX (MDcf): siliceous mylonite, metasiltstone, garnet schist, minor dioritic rocks; locally includes gneiss, amphibolite and granite

▨ GLENKEEN FORMATION (MDgk): maroon and grey-green sandstone and conglomerate, with minor grey and green siltstone and metavolcanic rocks

▨ MCADAM LAKE FORMATION - MDmlc: grey to locally maroon congomerate, sandstone, minor carbonaceous shale; MDmlsh: red shale, siltstone, sandstone, conglomerate; MDmlss: green-grey sandstone and siltstone, dark grey to black shale/oil shale and rare coal, minor grey conglomerate

CAMBRIAN

MIRA RIVER GROUP

LATE CAMBRIAN

▨ MCADAMS BROOK FORMATION (LЄMRmb): grey quartz-rich siltstone and sandstone

▨ MCNEIL FORMATION (LЄMRmn): dark grey shale, silstone and limestone

MIDDLE CAMBRIAN

▨ MACLEAN BROOK FORMATION (MЄMRml): grey interbedded quartz sandstone, siltstone and shale

▨ TROUT BROOK FORMATION (MЄMRtb): shale dark grey to rusty, brown well cleaved shale and siltstone

EARLY CAMBRIAN

▨ CANOE BROOK FORMATION (EЄMRcb): red-brown mudstone and siltstone, maroon siltstone and minor pink to red limestone

▨ MACCODRUM FORMATION (EЄMRmc): grey and green siltstone and shale, locally laminated with lighter grey silty layers

▨ SGADAN LAKE FORMATION (EЄMRsl): grey medium-grained quartz arenite and quartz pebble conglomerate

▨ BENGAL ROAD FORMATION (EЄMRbr): maroon to red conglomerate, sandstone, siltstone; minor grey siltstone, abundant detrital muscovite

LATE EDIACARAN

▨ KELVIN LAKE FORMATION (LɆkl): orange lithic arkose, pebble to cobble conglomerate, purple subarkose, red siltstone

- ▨ BALEINE GABBRO (LɆb): dark to light grey-green, fine- to medium-grained gabbro

MAIN-À-DIEU GROUP

▨ CANOE LAKE FORMATION (LɆMDcl): varied maroon to red and green heterolithic lapilli tuff; basaltic flows; basaltic lapilli tuff; conglomerate, litharenite and siltstone

▨ BELLE LAKE FORMATION (LɆMDb): dark grey to light grey-green, andesitic to dacitic lithic lapilli tuff

▨ SCATARIE ISLAND FORMATION (LɆMDsi): varied lapilli tuff, mainly dacitic to rhyolitic; minor fine-grained tuff and laminated siltstone

▨ NORTHWEST COVE FORMATION (LɆMDnw): basalt flows, interlayered red conglomerate, tuffaceous arkose and tuff

▨ SAVAGE COVE FORMATION (LɆMDsc): grey-green laminated siltstone; minor lithic subarkose; minor basalt

▨ RAGGED ROCKS COVE FORMATION (LɆMDrr): varied maroon to buff rhyolitic lapilli tuff

▨ BATTERY POINT FORMATION (LɆMDbp): tuffaceous conglomerate; buff to green and maroon laminated siltstone; basalt

▨ CONVICT POINT FORMATION (LɆMDcp): maroon to green conglomerate and laminated siltstone; lapilli tuff and tuffaceous conglomerate

▨ KELPY COVE FORMATION (LɆMDkc): basaltic and andesitic lapilli tuff; tuffaceous conglomerate; thin amygdaloidal basalt flows; maroon siltstone

▨ SCHOOL BROOK FORMATION (LɆMDsb): varied rhyolitic lapilli tuff; rhyolitic flows; minor maroon siltstone

▨ BIG LORRAINE HARBOUR FORMATION (LɆMDbl): basaltic flows and lapilli tuff; maroon siltstone

▨ GOOSEBERRY COVE FORMATION (LɆMDgc): lithic lapilli tuff and tuffaceous conglomerate; grey-green laminated siltstone; numerous dacitic porphyry sills and plugs

MIDDLE EDIACARAN

PLUTONIC ROCKS (in alphabetical order)

- ▨ BELFREY GUT PLUTON (MɆbg): grey medium-grained monzogranite
- ▨ BLACKROCK POINT GABBRO (MɆbr): dark grey gabbro with plagioclase phenocrysts
- ▨ CAPELIN COVE PLUTON (MɆcc): pink to light grey coarse-grained leucomonzogranite and minor granodiorite; widespread shearing and cataclasis
- ▨ GRAND RIVER PLUTON (MɆgr): pink to grey medium-grained leucogranite
- ▨ MACLEANS POINT PLUTON (MɆmp): grey to grey-green fine- to medium-grained tonalite

FOURCHU GROUP

▨ BOTTLE HEAD FORMATION (MɆFbh): basaltic lapilli tuff and breccia; basaltic flows (locally amygdaloidal); minor litharenite

▨ FRAMBOISE FORMATION (MɆFf): grey-green, crystal-rich dacitic tuff and lithic lapilli tuff; minor rhyolitic lapilli tuff and siliceous laminated tuff

▨ GULL LAKE FORMATION (MɆFgl): dark grey to black, fine-grained massive andesitic tuffs and flows; basaltic tuffs and flows; dark grey to black dacitic crystal-rich tuff; minor litharenite and siltstone

▨ MATHESONS LAKE FORMATION (MɆFml): black to grey, fine-grained andesitic lapilli tuffs and flows

▨ CRICKET LAKE FORMATION (MɆFcl): dacitic to rhyolitic crystal-rich lithic lapilli tuff; fine- grained rhyolitic tuff and chert; minor rhyolitic flows

▨ GABARUS FORMATION (MɆFg): grey-green dacitic to andesitic crystal-rich lithic lapilli tuff; abundant basaltic lenses (flows)

▨ JOHNSON LAKE FORMATION (MɆFjl): dacitic to rhyolitic lapilli ruff and tuffaceous conglomerate; mainly red to maroon

▨ KENNINGTON COVE FORMATION (MɆFkc): dacitic quartz-feldspar lapilli tuff and tuff

▨ CAPE GABARUS FORMATION (MɆFcg): basaltic and andesitic lapilli tuffs and flows

▨ FOURCHU HEAD FORMATION (MɆFfh): dacitic to rhyolitic lapilli tuff; minor basaltic to andesitic flows and fine-grained tuffs

EARLY EDIACARAN

PLUTONIC ROCKS (in alphabetical order)

- ▨ CHISHOLM BROOK PLUTONIC SUITE - EɆcbd: grey to black medium- to coarse-grained diorite to quartz diorite; EɆcbgd: red to pink to grey-green medium- to coarse-grained biotite-hornblende granodiorite, locally porphyritic with plagioclase phenocrysts; EɆcbmd: grey to pink fine- to medium-grained quartz monzodiorite with needle-like hornblende phenocrysts
- ▨ COXHEATH HILLS PLUTON - EɆchd: dark grey fine- to coarse- but mainly medium-grained diorite to quartz diorite; EɆchgd: pale grey medium-grained biotite-hornblende granodiorite grading to monzogranite; EɆchgb: dark grey medium- to coarse-grained gabbronorite; EɆchgmd: grey fine- to medium-grained quartz monzodiorite
- ▨ HUNTINGTON MOUNTAIN PLUTON - EɆhmd: grey fine- to coarse-grained dioritic rocks; EɆhmgd: grey medium-grained biotite granodiorite; EɆhmlg: pink medium- to coarse-grained leucogranite; EɆhmmg: pinkish-grey medium-grained monzogranite; EɆhmsg: pink fine- to medium-grained syenogranite with interstitial granophyre and plagioclase microphenocrysts
- ▨ IRISH COVE PLUTON (EɆic): grey medium-grained monzogranite
- ▨ MACDOUGALL POINT PLUTON - EɆmpmd: grey to green medium-grained monzodiorite; EɆmpgp: pink granitic porphyry with plagioclase and hornblende phenocrysts in a granophyric groundmass
- ▨ MACEACHERN LAKE PLUTON - EɆmlgd: light grey medium- to coarse-grained biotite-hornblende granodiorite, minor monzogranite; EɆmlmg: pinkish grey medium- to coarse-grained monzogranite; EɆmlqd: grey fine- to medium-grained quartz diorite, diorite and quartz monzodiorite
- ▨ SPORTING MOUNTAIN PLUTON - EɆsmgd: grey to pale pink fine- to medium-grained biotite-hornblende granodiorite transitional to monzogranite; EɆsmt: grey medium-grained tonalite; EɆsmgv: sheared granitoid and volcanic rocks
- ▨ SPRUCE BROOK PLUTON - EɆsbd: grey to dark grey, fine- to coarse-grained diorite to quartz diorite and quartz monzodiorite; EɆsbgd: grey medium-grained biotite-hornblende granodiorite gradational to tonalite; EɆsbmg: pinkish-grey medium-grained biotite-hornblende monzogranite

EAST BAY HILLS GROUP

▨ JOHNSTOWN FORMATION (EɆEBj): pink, brown and maroon rhyolitic lapilli tuff, tuff and flows

▨ MORLEY ROAD FORMATION (EɆEBmr): pink, brown and maroon rhyolitic lapilli tuff, tuff and flows

▨ BEN EOIN FORMATION (EɆEBbe): basaltic flows, commonly amygdaloidal, locally plagioclase-phyric; basaltic lapilli tuff; minor slaty tuff and tuffaceous conglomerate

▨ MCINTYRES BROOK FORMATION (EɆEBmb): andesitic to dacitic crystal-rich tuff and lapilli tuff; minor rhyolitic tuffs

▨ MOUNTAIN LAKE FORMATION (EɆEBmo): andesitic, dacitic and rhyolitic lapilli tuff and crystal-rich tuff

▨ REAR BIG POND FORMATION (EɆEBrb): andesitic crystal-rich tuff and lapilli tuff; minor rhyolite and siltstone

▨ MACMILLANS LAKE FORMATION (EɆEBml): basaltic to andesitic lapilli tuff and flows; minor tuffaceous conglomerate and litharenite

▨ SGURRA BHREAC FORMATION (EɆEBsb): dark grey to black dacitic lapilli tuff; minor basaltic to andesitic tuff

▨ MIDDLE CAPE LAKES FORMATION (EɆEBmc): amygdaloidal basalt; porphyritic basalt; basaltic to andesitic tuff and lapilli tuff

▨ REAR IRISH COVE FORMATION (EɆEBri): grey-green andesitic to dacitic lapilli tuff, mainly strongly cleaved; minor rhyolitic tuff

COXHEATH HILLS GROUP

▨ MACKEIGAN BROOK FORMATION (EɆCHmb): rhyolitic tuff, lapilli tuff and flows; minor basaltic to dacitic layers/lenses and tuffaceous sedimentary rocks

▨ MACBETH BROOK FORMATION (EɆCHma): andesitic tuff, lapilli tuff and flows; minor rhyolitic and basaltic lenses

▨ BEECHMONT FORMATION (EɆCHb): basaltic flows, tuff and lapilli tuff; minor rhyolitic, dacitic and andesitic lenses

PRINGLE MOUNTAIN GROUP

▨ UNDIVIDED (EɆPMu): varied basaltic to rhyolitic flows, crystal-lithic tuff and crystal tuff; minor grey-green, tuffaceous metasedimentary rocks; abundant mafic and felsic dykes

PLUTONIC ROCKS

- ▨ STIRLING BELT GABBRO (EɆsbg): grey to black medium- to coarse-grained gabbro
- ▨ STIRLING BELT MAFIC POPRHYRY (EɆsbmp): grey mafic porphyry with altered plagioclase phenocrysts

LATE CRYOGENIAN

STIRLING GROUP

▨ BARREN HILL LAKE FORMATION (LꞒSbh): rhyolitic flows and lapilli tuff, minor andesite, lapilli tuff

▨ RORY NEILS LAKE FORMATION (LꞒSrn): basalt-andesite-dacite flow breccia

▨ MACDONALD LAKE FORMATION (LꞒSmlb): basalt-andesite flows, flow breccia, minor lapilli tuff

▨ GRACIEVILLE FORMATION (LꞒSg): litharenite, conglomerate, siltstone, chert, dolostone

▨ WEST BRANCH MARIE JOSEPH BROOK FORMATION (LꞒSwb): andesitic lapilli tuff and ash tuff, minor dacite, lapilli tuff

▨ MACKILLOPS LAKE FORMATION (LꞒSml): lapilli tuff and ash tuff, rhyolite flows

▨ MACCORMICKS BROOK FORMATION (LꞒSmb): grey, green or buff quartz-feldspar rhyolite porphyry

Nova Scotia Department of Natural Resources
Geoscience and Mines Branch

Open File Illustration ME 2017-001

Bedrock Geology Legend for Cape Breton Island, Nova Scotia

Compiled by
S. M. Barr and C. E. White

NOVA SCOTIA

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June 16, 2017