

STRATIFIED ROCKS				LATE DEVONIAN TO CARBONIFEROUS	
Carboniferous				FAMENNIAN-TOURNAISIAN	DCFb
C	undifferentiated Carboniferous units	CcPHm	Middle Port Hood Formation: sandstone, siltstone, shale, coal and impure limestone	HORTON GROUP	Fisset Brook Formation, basalt member: vesicular porphyritic basalt and andesite, with minor interbedded red siltstone and conglomerate
WESTPHALIAN-STEPHANIAN					
CUMBERLAND GROUP		CcPHi	Lower Port Hood Formation: channelized sandstone deposits, siltstone, shale	CHA	Ainslie Formation: cross-bedded sandstone and conglomerate, siltstone, mostly fluvialite deposits
CCSM	Sydney Mines Formation: mudstone, siltstone, shale, sandstone, limestone, and major coal deposits	CC	cross-bedded and trough cross-bedded white medium sand arkose, minor siltstone, shale, and coal	CHS	Strathlorne Formation: grey and red siltstone, sandstone, micritic limestone, conglomerate with carbonate clasts
CCSB	South Bar Formation: sandstone, pebbly sandstone, minor conglomerate, mudstone, and rare coal	NAMURIAN		CHJ	Judique Formation: red cross-bedded medium to coarse sand lithic arkose, sandstone, minor conglomerate
CCI	Inverness Formation: arkose, pebbly sandstone and conglomerate, shale and coal	MABOU GROUP		DChC	Craigish Formation: dominantly conglomerate with red and grey sandstone, thick and thinly bedded
CCPHu	Upper Port Hood Formation: arkose, pebbly arkose and conglomerate, shale, and siltstone	CMu	Upper member including Pomquet Formation: red and green siltstone and sandstone, minor conglomerate	DCH	undifferentiated Horton Group
		CMi	Lower member including Hastings Formation: shale and siltstone, dolomitic siltstone, and thin stromatolitic dolostone beds		
		CW	undifferentiated Windsor Group		

CENTRAL AND NORTHERN CAPE BRETON ISLAND		SOUTHEASTERN CAPE BRETON ISLAND	
ORDOVICIAN-SILURIAN		HADRYNAN - DEVONIAN	
OSM	Money Point Group	HDa	amphibolite, variably foliated, locally schistose to gneissic
OS (M)j	rhylolite, felsic to intermediate tuff, lapilli tuff and volcanic breccia, minor volcanic flows and slate (433 +7/-4 Ma, U-Pb zircon in rhyolite from Sarah Brook Formation, Dunning et al. 1990) OSM: 427 ± 4 Ma, U-Pb zircon, Money Point Group, Keppie et al. 1992)	ORDOVICIAN	
OS (M)j	pelitic schist, foliated quartz-rich wacke, quartz pebble conglomerate, siltstone, polymictic meta conglomerate and meta-sandstone OSMc: equivalent unit in Money Point Group	OM	McAdams Brook Formation: quartz-rich siltstone and sandstone
OSv	chloritic schist, meta-volcanic rocks, metabasalt and mylonitic diorite	CMCL	MacLean Brook Formation: quartz arenite, siltstone, shale
OSd	diorite, schistose diorite, chloritic schist, mylonite, and amphibolite	MIDDLE CAMBRIAN	
ORDOVICIAN - CAMBRIAN		CT	Trout Brook Formation: shale, siltstone, and minor sandstone
OCM	McLeod Brook Formation and Northern Boisdale Hills volcanic unit: shale, siltstone, sandstone, basalt, andesite	CCB	Canoe Brook Formation: mudstone, siltstone, and minor sandstone
MIDDLE TO UPPER CAMBRIAN		CMC	MacCodrum Formation: siltstone and shale
CMN	MacNeil and MacMullin Formations: quartzite, shale, siltstone, minor limestone	CS	Sgaden Lake Formation (part of Morrison River Formation of Hutchinson, 1948): quartz arenite and quartz pebble conglomerate
CB	Bourinot Group including Eskasoni, Dugald, and Gygwa Formations: sandstone, wacke, siltstone, shale, breccia, amygdaloidal basalt, andesite, and volcanic tuff	HCK	Kelvin Glen Group: red pebble to cobble conglomerate, arkose, sandstone, siltstone
HADRYNIAN - DEVONIAN		LATE HADRYNIAN	
ODCp	pelitic gneiss, quartzofeldspathic gneiss, mica schist, minor calc-silicate rock, meta-conglomerate (462 ± 2 Ma, U-Pb detrital zircon, Chen et al. 1995)	MAIN-A-DIEU GROUP	
PSgn	biotite gneiss, amphibolite, pegmatite and local migmatite, pelitic schist, meta-quartzite, minor marble	HMM	heterolithic lapilli tuff, basalt flows, conglomerate, sandstone, siltstone
PSMR	Middle River metamorphic suite: amphibolite, gneiss, kyanite-muscovite schist, and minor marble	FOURCHU GROUP	
PSCN	Cape North Group: gneiss, high-grade pelitic and semi-pelitic schist, calc-silicate rock, marble, and amphibolite	HFb	basaltic lapilli tuff, breccia, flows, and minor sandstone
HOgn	diorite, mylonitic and schistose to gneissic diorite, biotite-garnet schist, minor sheared granite	HEb	amygdaloidal basalt, porphyritic basalt, tuff and lapilli tuff, minor conglomerate and sandstone
PROTEROZOIC		EAST BAY HILLS GROUP	
HCKgn	Kellys Mountain gneiss: cordierite-bearing paragneiss	HSit	lapilli tuff and ash tuff, rhyolite flows
HPv	Price Point Formation: sub-volcanic dacite and andesite, some lapilli tuff and volcanic flows	HEb	amygdaloidal basalt, porphyritic basalt, tuff and lapilli tuff, minor conglomerate and sandstone
PLHgn	Lime Hill gneissic complex: marble, calc-silicate rock, cordierite-andalusite/sillimanite gneiss, multiphase granitic injection complex		
PM PG	PM: marble, calc-silicate rock, gneiss, minor quartzite PG: limestone, marble, dolostone, calc-silicate rock, quartzite, feldspathic arenite, wacke, minor mafic metavolcanic rocks		
Pq	quartzite, psammitic schist, quartzofeldspathic gneiss, minor calc-silicate rock and amphibolite		
Pw	biotite and chlorite schist, metawacke, marble, dolostone, calc-silicate rock, quartzite, gneiss, schist, mafic metavolcanic rocks, amphibolite		

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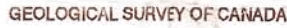
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CARBONIFEROUS		PLUTONIC ROCKS	
Cgb	St. Peters Canal gabbro: gabbro, diabase (339 ± 2 Ma, U-Pb zircon, Barr et al. 1995)	HSgd	granodiorite
DEVONIAN		HSt	tonalite, granodiorite
DMg	Margaree pluton, coarse porphyritic rapakivi granite	HSd	diorite
Dg	granite to syenogranite (includes Salmon Pool Pluton dated at 365 +10/-5 Ma, U-Pb zircon, Jamieson et al. 1986)	LATE HADRYNIAN	
DLg	Lower St. Esprit Pluton: hornblende-biotite monzogranite (378 +5/-1 Ma, U-Pb zircon, Bevier et al. 1993)	HCCg	Cheticamp pluton: biotite granite, biotite-muscovite granite, locally displaying mylonitic boundaries (550 ± 8 Ma, U-Pb zircon, Jamieson et al. 1986)
DCBg	Cameron Brook granodiorite: coarse-grained porphyritic granodiorite (402 ± 3 Ma, U-Pb zircon, Dunning et al. 1990)	HIt	Ingonish River tonalite: medium- to coarse-grained tonalite (555 ± 2 Ma, U-Pb zircon, Dunning et al. 1990)
DBg	Black Brook Granitic Suite: medium- to coarse-grained granodiorite, granite, and muscovite-biotite granite (373 ± 2 Ma, U-Pb monazite, Dunning et al. 1990)	Hgd	granodiorite, locally granite (includes Baddeck River granodiorite, 556 ± 4 Ma, U-Pb zircon, Dunning et al. 1990)
DNRg	West Branch North River Pluton: composite pluton of medium- to coarse-grained, light grey, porphyritic biotite-hornblende granodiorite, and medium- to coarse-grained pink granite	HKd	Kathy Road diorite: medium-grained amphibole-rich diorite, variably foliated to gneissic diorite, amphibolite (569 ± 2 Ma U-Pb zircon, Dunning et al. 1990)
DNHgn	Nelle Harbour orthogneiss (403 ± 3 Ma, U-Pb zircon, Dunning et al. 1990) with abundant enclaves of inclusions of mica schist and cross-cutting dykes of DBg	HGq	Giabrome Flowage quartz diorite (564 ± 2 Ma, U-Pb zircon, Dunning et al. 1990)
SILURIAN-DEVONIAN		Higd	Indian Brook granodiorite: medium-grained granodiorite to granite containing hornblende and biotite (564 ± 5 Ma, U-Pb titanite, Dunning et al. 1990)
SDg	medium-grained equigranular granite, biotite monzogranite, locally foliated and weakly chloritized	Hd	diorite, variably foliated to schistose chloritized and epidotized diorite
SDd	diorite	Hgr	foliated to non-foliated, locally mylonitic, medium grained pink granite
SDCgn	Cheticamp Lake gneissic complex: quartzofeldspathic gneiss, biotite schist, granite to granodiorite orthogneiss, (396 ± 2 Ma, U-Pb zircon, Dunning et al. 1990), mixed paragneiss and orthogneiss	HCCgd	coarse-grained biotite granite, granodiorite (includes Capelin Cove pluton, 574 ± 3 Ma, U-Pb zircon, Bevier et al. 1993)
SDPBgn	Pleasant Bay-Belle Cote Road gneissic complex: tonalitic to granodioritic orthogneiss, amphibolite, pelitic gneiss foliated granitic rocks and pegmatite (gneiss dated at 433 +20/-10 Ma, U-Pb zircon by Jamieson et al. 1986, and 411 ± 2 monazite by Barr and Jamieson 1991)	Hgds	medium- to fine-grained schistose granodiorite, gneissic granodiorite gradational to diorite and lineated amphibolite, strongly foliated and sheared rocks include biotite-garnet schist and amphibole-feldspar-quartz gneiss
SDPBcg	coarse-grained foliated granite, granitic gneiss	Hqm	medium-grained to porphyritic biotite-amphibole quartz monzonite
SDPBgd	schistose and gneissic granodiorite	HNBt	North Branch Baddeck River leucotonalite: medium- to coarse-grained tonalite, variably foliated to weakly gneissic with biotite (614 +38/-4 Ma U-Pb zircon, Jamieson et al. 1986)
SILURIAN		HCgd	granodiorite (includes Chisholm Brook Suite, 620 +3/-2 Ma, U-Pb zircon, Barr et al. 1990)
STBg	Taylor's Barran Pluton: medium- to coarse-grained, pink, weakly to strongly foliated granite and augen granite	Hg	granite, leucogranite
ORDOVICIAN		Hgb	gabbro
Og	granite (includes Cape Smokey granite, 493 ± 2 Ma, U-Pb zircon, Dunning et al. 1990; and Kellys Mountain leucogranite, 498 ± 2 Ma, Barr et al. 1990)	HELIKIAN	
Omg	monzogranite	Hls	Lowland Brook syenite (1080 +5/-3 Ma, U-Pb zircon, Miller et al. 1993)
HADRYNIAN - DEVONIAN		Hmd	monzonite, diorite, gabbro
HDgn	Barachois River gneissic complex: medium-grained orthogneiss and augen gneiss derived from granodiorite, sheared mylonitic gneiss, and minor migmatite and paragneiss	Ha	anorthosite
HDg	medium-grained variably foliated granite	HBC	Blair River Complex: predominantly quartzofeldspathic orthogneiss, with disseminated high grade calc-silicate rock, marble, amphibolite, metagabbro
HDgd	granodiorite, variably foliated to gneissic		
HDd	diorite		



## Geology Legend for Airborne Geophysics, Geology and Radarsat-1 SAR Compilation


(copied from Open File 3159)

# CAPE BRETON ISLAND


### NOVA SCOTIA

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