Pleistocene

Surficial deposits Q:u

Unconsolidated sediments (comp. various sources)

Middle Jurassic to Early Cretaceous

Dildo Pond pluton

Pegmatitic, biotite-titanaugite gabbro (comp. Currie,

Budgells Harbour Gabbro

Analcite gabbro, hornblende gabbro, hornblende pyroxenite, and biotite gabbro (Williams et al., 1985)

Pennsylvanian

Howley Formation

Grey to red sandstone, pebble-cobble conglomerate and siltstone, black carbonaceous shale, minor bituminous coal (Hyde, 1982)

Mississippian to Pennsylvanian

Red and grey conglomerate, sandstone, shale, siltstone and minor limestone (Kean et al., 1994b)

Late Devonian to Mississippian Deer Lake Group

M:D

Red and grey conglomerate, sandstone, siltstone and mudstone; grey calcareous dolostone and dolomitic limestone, with some oil shale (Williams et al., 1985)

Shanadithit Formation

Poorly indurated, red and grey sandstone and conglomerate; minor limestone and siltstone (Whalen,

Anguille Group (Deer Lake Basin)

DB:Ad

Grey and red sandstone, conglomerate, black and grey shale, minor dolostone and limestone, deposited in lacustrine and fluviatile environments (Williams et al., 1985)

Devonian to Carboniferous Gander Lake Granite

D:G

Massive, grey to white, K-Feldspar megacrystic, medium- to coarse-grained, biotite granite (comp. O'Neill and Colman-Sadd, 1993; comp. O'Brien et al.,

Mainly massive, pink, medium to mainly coarse-

Terra Nova Granite

grained, K-feldspar porphyritic to equigranular D:TN biotite+/- hornblende granite, rare aplite (comp. O'Brien et al., 1991)

Maccles Lake Granite

Mainly massive, medium to coarse grained, feldspar DB:ML porphyritic or megacrystic biotite granite (comp.

Blackwood et al., 1984; comp. O'Brien et al., 1991) Middle Brook Granite

granodiorite. (Blackwood, 1977)

megacrysts (Williams et al., 1985)

D:M

Deadmans Bay Granite D:D

Massive, homogeneous, coarse-grained, porphyritic, biotite granite, characterized by ubiquitous microcline

Massive, coarse grained, porphyritic granite /

Newport Granite

D:N

Massive, coarse-grained, megacrystic, biotite granite (Jayasinghe, 1978)

Ackley Granite Suite

D:A

Undivided, medium to coarse grained, massive to porphyritic, biotite granite; D:Ag - Massive, uniform pink, coarse grained, equigranular, biotite granite; minor miarolitic, medium to fine grained, granite; D:Agp -Pink and gray, medium to coarse grained, massive to porphyritic, biotite granite; minor biotite - muscovite phases; minor granodiorite

Petites Granite

Pink to red, coarse-grained, equigranular, potassium D:P feldspar-rich granite (Williams et al., 1985)

Pass Island Granite

Pink, medium- to coarse-grained, biotite-hornblende D:PI granite (O'Brien, 1998)

Francois Granite

lD:F

Two ring complexes mainly composed of high-silica, massive, fine- to coarse-grained, porphyritic to equigranular, biotite granite (comp. Dickson et al.,

Grev River Point Granite

Fine- to medium-grained, locally pegmatitic, D:GR hornblende-biotite, granite (comp. Dickson et al., 1996a)

Chetwynd Granite

mD:C

Pink, fine- to medium-grained, equigranular biotite granite; minor porphyritic to subporphyritic granite; unseparated, microspherulitic, quartz-feldspar porphyry dykes (O'Brien, 1990b)

Old Woman Stock

Pink, medium- and coarse-grained, porphyritic biotite granite; minor aplite (O'Brien, 1998)

Belleoram Granite

lD:B

D:OW

Grey to pink, medium- and fine-grained, equigranular granite containing many small, dark grey and green to black inclusions; red felsite and fine-grained granite, developed locally at the pluton margin; pink to brown quartz-feldspar porphyry (Red Head Porphyry) (O'Brien,

Middle Devonian

Hunts Ponds Granite

Foliated, equigranular, muscovite-biotite-garnet granite mD:H (O'Neill and Colman-Sadd, 1993)

Early Devonian to Pennsylvanian

Red-brown, grey and buff, very thick-bedded, polymict sandstone, conglomerate and breccia; minor black shale (comp. Dickson, 1996a)

Early to Late Devonian

D:g

Overflow Pond Granite D:O

Coarse-grained, locally garnetiferous, two-mica granite (Evans et al., 1994a)

Dark green, locally brown-weathering pyroxenite and gabbro; diorite and quartz diorite (O'Brien, 1998)

Fine to medium grained, massive gabbro and diorite (Blackwood et al., 1984)

Big Round Pond Granite

D:BR

Massive, medium-grained, biotite granite (Jayasinghe,

Sedimentary rocks at La Hune Bay

Weakly cleaved, calcareous siltstone and sandstone with lenses of carbonate, overlying fractured, carbonatecemented rubble zone in granite; caliche-like zone containing pebbles and boulders of granite (comp. Dickson et al., 1996b)

Great Bay de l'Eau Formation

Red, purple and buff, pebble to boulder conglomerate; minor green conglomerate and red and black shale; grey mafic sills and flows; local hornfels (O'Brien, 1998)

Pools Cove Formation

D:PC

Buff, pink and red, pebble and boulder conglomerate and arkosic sandstone (comp. O'Brien, 1998)

Cinq Isles Formation

Red micaceous sandstone, red and grey quartz-pebble conglomerate, red shale, and red and grey limestone (O'Brien, 1998)

Early to Middle Devonian Ocean Pond Granite

D:E

Early Devonian *Indian Point granite*

Partly synmetamorphic, leucocratic, garnetiferous, muscovite-tourmaline granite (O'Neill, 1991a)

eD:P

Red to orange, medium-grained, pink to orange, leucocratic biotite granite (O'Brien, 1998)

Feldspar porphyry and tonalitic to granitic intrusions (comp. Currie and Williams, 1995)

Loon Bay batholith

Massive, medium-grained tonalite to granodiorite and foliated biotite-hornblende diorite; marginal phase of eD:B biotite tonalite to granodiorite with prominent anhedral quartz (comp. Currie and Williams, 1995)

Rocky Bottom Tonalite

eD:YT Rocky Bay Pluton Grey, medium-grained, equigranular, biotite tonalite, containing minor amphibole (Williams et al., 1985)

eD:YP

Massive to foliated, equigranular to biotite-poikolitic, biotite-hornblende tonalite (Williams et al., 1985)

Frederickton Pluton eD:F

Medium-grained, weakly foliated, biotite-hornblende tonalite (Williams et al., 1985)

Island Pond pluton (Gander Bay) eD:I

Ragged Harbour Pluton

garnet granite and aplite (comp. Currie, 1995b)

Massive to foliated, biotite-muscovite and muscovite-

eD:H

Foliated to schistose, medium-grained, equigranular to porphyritic, biotite-muscovite granite; locally garnetiferous leucogranite (Williams et al., 1985)

Aspen Cove Pluton

eD:A

Massive to foliated, medium-grained, biotite+/muscovite granodiorite and granite; locally garnetiferous

in leucocratic phases (Williams et al., 1985)

Third Berry Hill Pond granite eD:T

Fine- to coarse-grained, garnetiferous, muscovite-biotite leucogranite and coarse-grained, porphyritic, biotite granite (comp. Blackwood and Green, 1983)

Middle Ridge Granite

Fine-, coarse-grained or pegmatitic, equigranular or eD:M porphyritic, garnetiferous muscovite-biotite granite (comp. Blackwood and Green, 1983)

Long Island Granodiorite

Hornblende-biotite granodiorite, biotite granite, felsite, and quartz-feldspar porphyry (O'Brien, 1991b)

Late Silurian to Mississippian Ironbound monzonite

Massive to foliated, medium- to coarse-grained, biotite +/- hornblende +/- augite monzonite, monzodiorite, granodiorite and granite (O'Brien and Dickson, 1986)

Late Silurian to Late Devonian Ramea Complex

Massive to foliated, leucocratic granite, potassiumfeldspar porphyritic biotite granite, biotite-hornblende granodiorite, and metagabbro; strongly sheared to mylonitic, potassium-feldspar porphyroclastic granite; posttectonic gabbro, quartz diorite and diabase (comp. Dickson et al., 1996a)

Coarse-grained, equigranular, pink biotite granite with

rapakivi phases; rhyolite porphyry dykes (Chorlton,

1980a) Porphyritic granite, granodiorite, monzodiorite and

quartz diorite (comp. Chorlton, 1980a)

Quartz gabbro, diabase (Chorlton, 1980a)

Fine- and medium-grained, pink biotite- and muscovitebearing, two-feldspar leucogranite; local pegmatite and a single exposure of a tuffisite dyke (comp. Chorlton and Knight, 1983)

Quartz veins (Colman-Sadd et al., 1979)

(comp. Colman-Sadd et al., 1979)

Pink, equigranular, medium-grained, biotite granite

Red and grey, micaceous sandstone and conglomerate (possibly equivalent to the Botwood Group) (comp. Evans et al., 1994a)

Botwood Group S:B

Piccaire granite

SD:PI

Subaerial mafic and felsic flows and pyroclastic rocks, and shallow marine to subaerial, red, green and grey sandstone, siltstone, shale, and minor conglomerate (comp. Williams et al., 1985)

Dolland Pond formation

Thin- to medium-bedded, moderately cleaved, dark greenish-grey sandstone, siltstone, shale and polymict pebble conglomerate; minor thick-bedded, subangular, polymict, cobble conglomerate; metamorphosed in the lower greenschist facies (Colman-Sadd and Swinden, 1989: Dickson, 1990c)

Dolman Cove Belt

Felsic volcanic rocks, principally fine-grained, felsic pyroclastic rocks and felsic to intermediate schist, but also including rhyolite, welded tuff, agglomerate, felsite, and tuffaceous metagreywacke; lesser amounts of mafic metavolcanic rocks, amphibolite, metagreywacke, metasiltstone, semipelitic schist, conglomerate, and injection gneiss (comp. Chorlton, 1980a; comp. Chorlton, 1980b)

La Poile Group

S:L

S:D

Massive to stratified quartz-feldspar crystal tuff; bedded lithic tuff and agglomerate; massive to flow-banded rhyolite and welded tuff; minor breccia; quartz-rich, cross- and planar-bedded sandstone; conglomerate, grit, tuffaceous wacke, slate and argillite; schistose to hornfelsic equivalents (comp. O'Brien and O'Brien,

Springdale Group

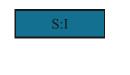
Subaerial felsic, intermediate and mafic flows and pyroclastic rocks; fluviatile red sandstone, conglomerate S:S and shale; felsic and intermediate subvolcanic intrusive rocks (comp. Williams et al., 1985; comp. Coyle, 1992)

Grey calcareous siltstone with local fossiliferous

limestone lenses, overlain by grey to black shale

basal unit of coral-bearing limestone and limestone

Indian Islands Group



Indian Islands Group?

breccia (comp. Currie and Williams, 1995; comp. Currie, Medium- to very thick-bedded, variably cleaved, grey, buff, red and green sandstone, siltstone, shale and

conglomerate containing felsic volcanic, grey sandstone

and quartz-veined sandstone clasts; local calcareous horizons containing corals, crinoids and brachiopods

containing thin beds of pale buff siltstone; discontinuous

Northwest Cove granite

Foliated, pink, medium-grained, equigranular, muscovite S:N and muscovite-biotite granite (comp. Colman-Sadd et al., 1979)

(Dickson, 1996a)

Rogerson Lake Conglomerate S:R

Grey, purple, green and red conglomerate and, locally, micaceous and cross-bedded, arkosic sandstone (comp. Evans et al., 1994a)

Rogerson Lake Conglomerate? Polymict conglomerate with minor sandstone beds S:R?

(comp. Colman-Sadd and Russell, 1988) Wild Cove Pond Igneous Suite

granite (Hibbard, 1983)

(Dickson et al., 2000)

Southwest Brook granite S:SW

Pink, massive, fine-grained, granophyric granite

Diorite, granodiorite, biotite granite, and two-mica

Early Silurian

S:W

King's Point Complex eS:K

Peralkaline to metaluminous, felsic subaerial ash-flow tuffs, and hypabyssal to subvolcanic syenite, quartzsyenite and granite (comp. Miller and Abdel-Rahman,

eS:S

Sheffield Lake Complex

Variably welded, fine-grained ash-flow tuffs containing crystals of quartz and alkali feldspar with less abundant lithic clasts; aphanitic, commonly flow-banded, vitric tuffs; mafic to intermediate flows; peralkaline quartzpotassium-feldspar porphyry characterized by metasomatic oikocrysts of riebeckite (comp. Coyle et al.,

Quartz-feldspar porphyry containing abundant mafic and

intrusions into the Cape St. John Group (Hibbard, 1983)

ultramafic xenoliths; includes minor quartz-feldspar

La Scie Intrusive Suite

Cape Brule Porphyry

eS:B

Biotite granite, riebeckite syenite, and pyroxene gabbro, all of which may be genetically related (comp. Hibbard,

Micmac Lake Group eS:M

Felsic volcanic and volcaniclastic rocks, sandstone. conglomerate, and mafic flows (Hibbard, 1983)

Cape St. John Group

eS:C

eS:CL

eS:W

Bimodal sequence of mainly rhyolitic and trachytic ash flow tuffs, flows and agglomerates, and dark green to purplish mafic flows and pyroclastic rocks; includes subordinate andesitic to dacitic flows and pyroclastic rocks, cross-bedded sandstone, and conglomerate; metamorphosed in the greenschist and amphibolite facies (Williams et al., 1985)

Charles Lake volcanic rocks

Quartz - feldspar porphyritic, flow-layered, pink to purple ignimbrite, quartz-porphyritic yellow rhyolite, and pink felsic tuff; equigranular to rarely plagioclaseporphyritic, grey to black, very thick basalt flows, rare grey sandstone and pillow lava; felsic and mafic volcanic rocks are commonly interlayered; local, volcanic clast-rich, cobble conglomerate (comp. Dickson, 2000c)

Buff, black and white, medium-grained, equigranular,

hornblende +/- biotite monzonite, pyroxene-hornblende

Western Head Granite

containing cognate xenoliths of diorite; unseparated

septae of Roti Intrusive Suite (O'Brien, 1990b) Gull Pond Ridge pluton Light brown to pale reddish brown, medium-grained

diorite, and leucogabbro (Hibbard, 1983)

locally foliated, biotite hornblende granodiorite,

Star Lake intrusive suite

eS:R

Slightly to moderately foliated granite and minor granodiorite intrusions ranging from subsolvus muscovite-garnet granite, through metaluminous and peraluminous compositions, to peralkaline arfvedsonite granite (comp. Whalen, 1993a)

Topsails Igneous Suite

Donamagon Granite

eS:F

Granite, granodiorite, syenite and gabbro, including peralkaline intrusions, and lesser volcanic rocks (comp. eS:T Whalen and Currie, 1988)

(Hibbard, 1983)

Flatwater Pond Group Pillow lava, pillow breccia, and diabase dykes and sills; mafic and felsic volcaniclastic rocks; black slate and

boulder conglomerate (comp. Hibbard, 1983)

Medium- to coarse-grained, pink, biotite granite

Burlington Granodiorite Mainly light grey to greenish grey, medium-grained, eS:BU hornblende-biotite granodiorite and quartz diorite; minor



Foliated, white to beige, medium-grained, equigranular, biotite-amphibole granodiorite with minor granite, gabbro and diorite (comp. Cawood and van Gool, 1998;

related monzonitic and granitic phases (Hibbard, 1983)

Late Ordovician to Middle Devonian



Conglomerate, greywacke, siltstone and shale; pebbly sandstone; graphitic shale; limestone; gabbro; chloritesericite schist; breccia and cataclastic rocks; rhyolite, felsic pyroclastic and epiclastic rocks; pillowed, massive and brecciated basalt; granite (comp. Hall and van Staal,

Altered, brecciated and quartz-veined, pink, leucocratic granite containing secondary muscovite; stibnite occurs

Late Ordovician to Late Silurian Kim Lake granite

OS:K

Late Ordovician to Early Silurian

Southern Long Range mafic intrusions Mafic plutons, layered gabbro, hornblende gabbro,

lecogabbro, diorite, quartz diorite, and minor

Fine- to medium-grained gabbro intrusive into

Ordovician age rocks (comp. Whalen, 1993a)

turbiditic environment (comp. various sources)

granodiorite (Currie and van Berkel, 1992)

locally along joints (Dickson, 2000a)

Badger Group

OS:B

Grey, well-bedded greywacke, including conglomerate layers, overlain by grey and minor red conglomerate; sedimentary structures indicate deposition in a mainly

Late Ordovician

Lawrence Harbour Formation

Black, carbonaceous shale; black, pyritiferous siltstone with black shale partings; brown-weathered, manganiferous chert, siliceous argillite and rare tuff; grey chert with bioturbated, black shale laminae (O'Brien, 1992a)

Black shale and minor siliceous slate, chert, argillite, and

greywacke (Evans et al., 1994a)

1985)

(Dean, 1977g)

Main Point Formation

Dark Hole Formation

chert lenses (comp. Currie, 1995b)

Tuffaceous dark chert overlain by slaty argillite with

minor thinly bedded siltstone layers (Williams et al.,

Red to green and black chert; black carbonaceous

argillite and argillaceous siltstone; minor siliceous tuff

Graptolitic, black shale containing bedded chert and

Shoal Arm Formation

Middle Ordovician to Early Silurian Porterville gabbro

> Massive, epidotised, fine-grained gabbro (Dickson et al., 2000)

Middle to Late Ordovician

O:g

Massive to moderately foliated granodiorite and minor tonalite. with many small mafic to ultramafic fragments (Whalen and Currie, 1988)

Granby Island Formation

Dark grey to black slate, argillite, and greywacke; minor O:GY boulder conglomerate (Hibbard, 1983)

Middle Ordovician

Impure, fossiliferous and pyritiferous limestone conglomerate and calcarenite, containing ophiolitic detritus (comp. Colman-Sadd et al., 1992)

Gummy Brook gabbro

Medium-grained equigranular gabbro sills; minor dark grey diorite sheets; coarse-grained glomeracrystic gabbro and diabase (in places cutting epidotized and saussuritized gabbro); pretectonic relative to structures in the Exploits Subzone (O'Brien, 2001b)

Thwart Island gabbro

Layered or massive, medium- to coarse-grained, hornblende-pyroxene gabbro sills (comp. Dickson et al., 2000; comp. Dickson, 2000c)

Ebbegunbaeg Hill granite

Lineated or foliated, fine- to medium-grained,

equigranular biotite granite (Colman-Sadd and Swinden,

Strongly foliated or mylonitic, pink to white, mostly

pegmatitic, garnetiferous, muscovite granite (comp.

Massive to foliated, equigranular or porphyritic, biotite-

hornblende granodiorite and tonalite (comp. Whalen,

Great Burnt Lake granite

megacrystic, biotite granite (comp. Colman-Sadd et al., Medium-grained, biotite-muscovite granite and

Through Hill Granite

Lewaseechjeech Brook plutonic suite

Garnet-tourmaline-muscovite pegmatitic granite (Colman-Sadd, 1985a)

Colman-Sadd and Russell, 1988)



Department of Environment and Conservation

Department of Natural Resources

Map No. 2e

BEDROCK GEOLOGY LEGEND

SYMBOLS Contact (defined, approximate, assumed)...... Contact; gradational or transitional.... Unconformity, defined... High Angle Fault... Thrust Fault... Shear Zone.... Anticlinal axis defined...

Synclinal axis defined...

Colman-Sadd, S. P., and Crisby-Whittle, L. V. J. (compilers) 2005: Partial bedrock geology dataset for the Island of Newfoundland (NTS 02E, 02F, 02L, 02M, 11O, 11P, 12A, 12B, 12G, 12H, 12I, 12P and parts of 01M, 02D). Newfoundland and Labrador Department of Natural Resources, Geological Survey, Open File NFLD/2616 version 6.0.



Late Silurian to Middle Devonian

Barasway Point gabbro

Dark green to black, medium- to coarse-grained, locally foliated, hornblende gabbro (containing pink feldspars in places); minor diorite and intrusion breccia; unseparated diabase dykes (O'Brien, 1990b)

Grey to pink, brecciated and hematized, plagioclase SD:rh porphyritic rhyolite (Dickson, 1990a)

Cochrane Pond granite

Massive to weakly foliated, fine- to medium-grained, SD:CP equigranular, muscovite-biotite granite (O'Brien and Dickson, 1986)

North West Brook Complex

SD:X

SD:MI

Pink, buff and grey, weakly foliated, equigranular to potassium porphyritic, biotite, biotite-muscovite and muscovite granite and granodiorite; cut by pegmatite and aplite veins containing muscovite, garnet and tourmaline (comp. Dickson, 1987)

Missing Island Granodiorite

Grey, medium-grained, equigranular, biotite granodiorite, containing accessory hornblende; associated aplite dykes contain muscovite and garnet (Williams et al., 1985)

Matthews Pond Granodiorite

Grey, medium-grained, equigranular, biotite-muscovite SD:MP granodiorite; associated aplite dykes contain muscovite and garnet (Williams et al., 1985)

Dolland Bight granite

White, equigranular, garnetiferous, muscovite and muscovite-biotite granite, commonly pegmatitic, locally SD:DB foliated; occurs as sheeted sills within the Little Passage Gneiss (comp. various sources)

North Bay Granite Suite

Massive to weakly foliated, medium- to coarse-grained, equigranular to porphyritic, biotite +/- muscovite SD:N granodiorite and granite; locally includes biotitehornblende tonalite, muscovite-garnet granite, gneissic granite and migmatite (comp. Williams et al., 1985)

Kaegudeck diabase

Green to grey, generally massive, medium- to finegrained, mainly equigranular to locally plagioclaseporphyritic, chloritized diabase sills and dykes (Dickson,

Late Silurian to Early Devonian

Ten Mile Lake formation Purple to crimson shale interbedded with thin, pink sandstone beds and a few thick, pink to grey-green sandstone beds (comp. Currie and Williams, 1995)

La Poile Granite

Mainly white, megacrystic alkali feldspar, biotite granite and granodiorite with associated aplite and pegmatite phases; minor sheets and pegmatites intrude the Rose Blanche Granite (comp. van Staal et al., 1996b; comp. Chorlton, 1980a)

Peter Snout granite

Massive, fine- to medium-grained, equigranular, biotite +/- muscovite granite; locally garnetiferous (comp. O'Brien and Dickson, 1986; comp. O'Brien, 1982)

Medium- to fine-grained equigranular leucogranite; contains minor muscovite and garnet (Chorlton, 1980a)

Well foliated granodiorite, tonalite and muscovite-SD:t bearing granite; the latter may or may not contain biotite and/or garnet (comp. Chorlton, 1980b)

Piglet Brook rhyolite

Pink to cream rhyolite (Chorlton, 1980b)

Hawks Nest Pond Porphyry

Pink to red, fine-grained, locally foliated, biotitebearing, quartz-feldspar porphyry containing pale green, saussuritised plagioclase (O'Brien, 1990b)

Rose Blanche Granite

SD:HN

Mainly white, rarely pink, foliated, equigranular, biotitemuscovite granite, locally garnet-bearing, and tonalite and granodiorite; contacts with country rock generally gradational and characterized by abundant migmatites; elongated xenoliths or enclaves of country rock common (comp. van Staal et al., 1996b; comp. Chorlton, 1980a)

Otter Point Granite

SD:RB

Pale pink to buff, coarse-grained, potassium-feldspar porphyritic, locally foliated, biotite-bearing, megacrystic granite; minor granite pegmatite (O'Brien, 1990b)

Late Silurian

McCallum Granite

1S:M

Fine- to coarse-grained, equigranular to feldspar porphyritic, biotite granite to granodiorite that is commonly banded (Blackwood, 1985)

Gaultois Granite

Dominantly well-foliated, coarse-grained, biotite granite and granodiorite, containing prominent pink, potassiumfeldspar megacrysts; includes equigranular tonalitic, quartz-dioritic, dioritic and gabbroic phases and inclusions; commonly cut by pink pegmatite and aplite veins (comp. various sources)

Seal Nest Cove tonalite

Fine-grained, biotite tonalite, containing plagioclase phenocrysts (Colman-Sadd et al., 1979)

Dark green to black (locally containing pink feldspars), medium- to coarse-grained gabbro (O'Brien and O'Brien,

Early Silurian to Late Devonian

SD:u

Unseparated, foliated granite and metasedimentary rocks (in approximately equal proportions) (O'Brien et al.,

Mainly massive, medium to coarse grained, feldspar porphyritic or megacrystic biotite granite (Blackwood et

Granite and quartz-feldspar porphyry (Kean et al.,

Gabbro, diorite and quartz monzonite (comp. Evans et

Medium- to coarse-grained, undeformed, pink, equigranular, locally potassium-feldspar megacrystic, biotite granite (Kean, 1983)

locally contains garnet, tourmaline, or hornblende.

Gabbro, diorite and diabase (Swinden and Sacks, 1996) Mainly biotite+/- muscovite granite and granodiorite,

Foliated, grey or pink, equigranular sericitic granite, cut by vuggy quartz veins and containing small lenses of massive pyrite (comp. Colman-Sadd, 1989)

(Blackwood et al., 1984)

Dawes Pond Granite Grey to pink, medium- to fine-grained granite, quartz-SD:D monzonite and granodiorite (Dean, 1977d)

Fogo batholith

SD:F

SD:mp

Pink, medium-grained, amphibole granite to granodiorite; fine-grained alaskitic granite, feldspar porphyry and microgranite; diorite and lesser gabbro, locally layered; quartz diorite, monzodiorite, agmatite and hybrid rocks; minor hornblendite, clinopyroxenite and peridotite; felsite, intermediate and mafic dykes (comp. Currie, 1997b; comp. Baird, 1958)

Black Cove Gabbro

Massive to weakly foliated, fine- to coarse-grained, hornblende metagabbro and hornblendite (Dickson et al.,

Early Silurian to Middle Devonian

Medium- to coarse-grained, massive, biotite SD:rr gabbronorite (Kean, 1983)

Long Pond diorite Grey, medium-grained, equigranular, hornblende-biotite diorite (comp. Colman-Sadd, 1980)

Metamorphosed diorite (comp. Dickson, 2000a) SD:d

Steel Pond gabbro

SD:T

Equigranular, medium-grained, hornblende and hornblende-biotite gabbro, diorite and minor granodiorite (Colman-Sadd and Swinden, 1989)

Round Pond Gabbronorite

Equigranular, medium-grained, olivine gabbronorite, hornblende and hornblende-biotite gabbro and diorite, SD:U and minor hornblende granodiorite (Colman-Sadd and Swinden, 1989; Colman-Sadd, 1980)

Redcross Lake Intrusion

Medium-grained, grey gabbro and/or diorite, cut by veins of gabbroic and granitic pegmatite; lesser amounts SD:RC of troctolite, dark green pyroxenite and biotite granite; local igneous layering (comp. Colman-Sadd, 1987)

Medium-grained, biotite granite (Kean, 1982) SD:rg

Equigranular, medium-grained, white, muscovite-biotite SD:w granite and quartz-feldspar porphyry (Colman-Sadd,

Wilding Lake granite

Grey, foliated, medium-grained, porphyritic and equigranular biotite granite, associated with garnet-SD:WL muscovite aplite veins; minor grey or pink, unfoliated biotite granite (comp. Colman-Sadd, 1987)

Early Silurian to Early Devonian

Uralitized and saussuritized gabbro dykes, possibly related to the Mount Peyton Intrusive Suite (comp. Currie, 1995a)

Mount Peyton Intrusive Suite

Equigranular, biotite granite and minor granodiorite; equigranular, mainly hornblende and pyroxene gabbro; diabase dykes (comp. various sources)

Bear Pond gabbro

White, coarse-grained and black, medium-grained, hornblende gabbro and black diabase; gabbro locally displays a weak mineral alignment; possibly equivalent to gabbro 'mlc' of the Mount Peyton Intrusive Suite (Dickson, 1996a)

Foliated, medium-grained, hornblende gabbro (Jayasinghe, 1978)

Massive, medium-grained, muscovite granite and felsite SD:c (O'Brien and Dickson, 1986)

Massive to strongly foliated, buff to pink, medium-SD:bn grained, equigranular to quartz-porphyritic, biotite granite (Dickson et al., 1990)

> Dykes, sills and stocks of white, equigranular, garnetiferous, muscovite and muscovite-biotite granite, fine- to medium-grained or pegmatitic, locally foliated (comp. Colman-Sadd and O'Driscoll, 1979; comp. Blackwood, 1985)

Massive to foliated, medium to coarse grained, feldspar porphyitic or megacrystic biotite granitoids; biotite muscovite granite and garnetiferous leucogranite; sereens and sheets of schist, psammite, quartzite and amphibolite east of Meelpaeg Lake

Cape Freels Granite

SD:gp

SD:g

Foliated to massive, coarse-grained, megacrystic, biotite granite (Jayasinghe, 1978)

Business Cove Granite

SD:BU

SD:NR

SD:DF

SD:LB

Foliated, medium-grained, muscovite-biotite granite with minor garnet (Jayasinghe, 1978)

North Pond Granite

Foliated (locally massive), medium-grained, muscovitebiotite or porphyritic granite with minor garnet (comp. Jayasinghe, 1978)

Wareham Granite SD:W

Foliated (locally massive), coarse-grained, megacrystic, biotite granite (Jayasinghe, 1978)

Dover Fault Granite

Foliated, fine to medium grained granitoid, ranging in composition from granite to adamellite to granodiorite locally mylonitized, garnetiferous or porphyritic. (comp. O'Brien et al., 1987)

Lockers Bay Granite

Coarse-grained, microcline, megacrystic, biotite granite. It is overprinted by a penetrative foliation, commonly with a cataclastic component. (Williams et al., 1985)

Eastern Meelpaeg Complex: Unseparated, foliated, medium to coarse grained equigranuler to porphyitic biotite-hornblend granitoids, biotite - muscovite granite and muscovite - garnet - tourmoline granites; includes minor sedimentary rocks. May include rocks equivalent to CO:gm

Burgeo Intrusive Suite

Variably foliated, feldspar -porphyritic, biotite +/hornblende granodiorite and granite, and lesser feldsparporphyritic biotite +/- muscovite granite; minor gabbroic rocks (comp. Dickson et al., 1996a)

Roti Point felsite

SD:RP

SD:S

Buff to light pink, aphanitic to microporphyritic felsite; brecciated (tuffisitic) texture; marginal stockworks of quartz veins (O'Brien, 1990b)

Skull Hill Quartz Syenite

Quartz syenite, quartz monzonite, diorite and gabbro (comp. Evans et al., 1994b)

Hodges Hill Intrusive Suite

Massive, fine- to coarse-grained, equigranular to Kfeldspar-porphyritic, mainly pink or red, biotite granite, SD:H granodiorite and minor tonalite; massive, fine- to coarsegrained gabbro and quartz diorite (comp. Dickson, 2000c)

sandstone (comp. various sources)

Early to Late Silurian

Stony Lake Volcanic Rocks Rhyolite and rhyodacite tuffs, welded tuffs, breccias and S:T minor flows; associated red and grey siltstone and

Early Ordovician to Late Devonian Partridge Point granite

White to light grey, medium-grained, leucocratic,

Granodiorite, porphyry, dacite, diabase and gabbro

muscovite granite; locally garnetiferous (Hibbard, 1983)

Early Ordovician to Late Silurian

S:P

O-D:i

Suley Ann Cove pluton White to grey, medium-grained tonalite, quartz OS:SA monzonite and quartz-feldspar porphyry (Kean et al.,

(Kean et al., 1994b)

Weakly foliated, fine-grained, equigranular mafic dykes (Colman-Sadd, 1980)

diabasic phases (Kean, 1979a)

Hill intrusive suite (Dickson, 2000c)

Metadiabase dykes (Chorlton, 1980a)

Schistose and folded, medium- to thin-bedded, grey biotite psammite, semipelite, migmatite and minor felsic tuff; all probably contact metamorphosed by the Hodges

Fine- to medium-grained gabbro and diorite with minor

Early Ordovician to Early Silurian

Duder Group

Intensely cleaved, dark grey shale and siltstone containing rare blocks of volcanic rocks and limestone; melange consisting of blocks of gabbro and bimodal volcanic rocks in sheared siltstone and shale; conglomerate, grey and greenish psammite and siltstoneshale rhythmites, and olistostrome beds (comp. Currie,

Early to Late Ordovician

O:k

Black, graphitic, well-cleaved shale and siltstone containing graptolites ranging in age from late Arenig to early Ashgill (comp. Dickson, 1996a; comp. Williams and Tallman, 1995)

Pink, fine- to medium-grained, biotite+/-muscovite granite and aplite (Whalen and Currie, 1988)

Swinden, 1989)

Hinds Brook Granite

White to pink, medium- to coarse-grained, biotiteamphibole, K-feldspar-porphyritic, two-feldspar granite (Whalen and Currie, 1988)

Poorly bedded to unbedded, medium-grained psammitic schist, and quartz-biotite and graphitic schist, containing varying proportions of quartz and granite sweats; probably derived by metamorphism of the Salmon River Dam or Cold Spring Pond formations (Colman-Sadd and

Cold Spring Pond Formation

Green, volcaniclastic arkose and greywacke forming turbidite sequences; interbedded black, graphitic slate and polymictic conglomerate; mafic pillow lava and massive basalt, associated with black, siliceous, quartz +/- feldspar crystal tuff and rhyolitic porphyry (comp. Swinden, 1988)

Grey, foliated and sheared, medium-grained, equigranular, biotite granodiorite (Dickson, 1987)

Baie d'Espoir Group

Marine clastic sedimentary rocks, including large amounts of turbidite with a significant volcanogenic component; includes felsic, intermediate and mafic volcanic rocks, most of which are pyroclastic and probably submarine (Williams et al., 1985)

Davidsville Group

Shale and thinly bedded siltstone and sandstone, probably representing distal turbidites; thickly bedded sandstone and minor shale and conglomerate, probably representing more proximal turbidites; minor limestone and felsic and mafic volcanic rocks (comp. Williams et

Southwest Brook complex

Foliated and massive tonalite, biotite granite, granodiorite, quartz diorite and leucogranite; commonly porphyritic; medium- to coarse-grained hornblende gabbro and diorite; weakly foliated fine- to mediumgrained diabase (comp. Currie and van Berkel, 1992; comp. Kean, 1983)

Medium-grained, hornblende-rich (+/- biotite),

equigranular tonalite (O'Brien, 1982)

Siltstone, shale and minor sandstone containing coticules and olistostromes; melange of siltstone, sandstone and О:Н mafic volcanic blocks in a black shale matrix; volcaniclastic rocks, pillowed and massive basalt, and mafic dykes (comp. Johnston et al., 1994)

Boones Point Complex

Hamilton Sound group

Polymictic blocks in scaly-foliated melange, straightened metasedimentary and metavolcanic rocks, and mylonite; mainly derived from the Moores Cove Formation of the Cottrells Cove Group, but includes blocks probably derived from other units of the Notre Dame and Exploits subzones (comp. O'Brien, 1991b)

Sops Head Complex

Tectonic melange containing large blocks and lenses of mafic and felsic volcanic rocks, limestone, conglomerate, greywacke and argillite, in part as fault slivers and in part in a deformed shale matrix; includes rocks that may have been derived from the Roberts Arm Group, the Sansom Formation and possibly the Shoal Arm Formation (comp. Bostock, 1988)

Harbour Le Cou Group

Thick- to medium-bedded psammite with thin beds of rusty, sulphidic pelite and sheets of garnet- and/or clinopyroxene-bearing, locally pillowed, amphibolite; calc-silicate pods or lenses are common in thick psammite beds; thin-bedded, rusty sulphidic pelite to semipelite, minor psammite with thin bands of coticule and sparse to absent amphibolite; sulphidic pelite and semipelite metamorphosed to biotite-muscovite-garnetsillimanite schist; includes some narrow sheets of Rose Blanche Granite (comp. van Staal et al., 1996b)

Cinq Cerf Gneiss (comp. O'Brien and O'Brien, 1989)

Pierre's Pond plutonic suite

Mainly foliated, biotite-hornblende granodiorite, and O:P hornblende tonalite, diorite and gabbro (comp. Whalen,

Grey, mainly fine-grained, equigranular, nebulitic hornblende granite, containing ubiquitous xenoliths of

Migmatites associated with Burgeo Intrusive Suite

High grade metamorphic rocks adjacent to and included within the Burgeo Intrusive Suite; includes migmatite, agmatite, granitoid gneisses, paragneiss, amphibolite and schist (comp. O'Brien and Dickson, 1986)

Fine- to coarse-grained, equigranular granodiorite and

tonalite (Kean et al., 1994b)

Biotite granite and granodiorite (Kean, 1982)

Long Island pluton

Grey to black, medium-grained granodiorite, diorite and gabbro exhibiting multiphase intrusion breccias; minor granite aplite (Kean et al., 1994b)

Dolland quartz diorite

gabbro (Kean et al., 1994b) Cooper's Cove pluton

Grey to black, medium-grained quartz diorite and minor

Colchester Pluton

Medium- to coarse-grained granodiorite, quartz-diorite, tonalite, diorite and gabbro (comp. Kean et al., 1994b)

Quartz-monzonite, granodiorite, granite, tonalite, quartz-

diorite, diorite and gabbro (comp. Kean et al., 1994b)

Wellman's Cove pluton

Grey to black, medium-grained diorite, quartz diorite and gabbro with extensive xenoliths of mafic and ultramafic rocks; diabase and red felsic dykes (Kean et al., 1994b)

Bob Head pluton

Keepings Gneiss

O:KG

Medium- to coarse-grained gabbro and diorite; grey to pink, quartz monzonite with mafic xenoliths (Kean et al.,

Massive and banded, felsic, amphibolite facies schists,

with intermediate to mafic lenses; quartzofeldspathic

gneiss; commonly migmatitic; sedimentary features preserved locally (comp. Williams et al., 1985)

Cormacks Lake Complex

Supracrustal rocks consisting of cordierite-gedrite gneiss, psammite, pelite calc-silicate gneiss, and amphibolite, which includes garnet-hornblende +/clinopyroxene layered metavolcanic rocks and metagabbro; intruded by orthogneiss consisting of garnet-hornblende-clinopyroxene granodiorite, locally with blue quartz eyes; younger charnockitic clinopyroxene-garnet +/- orthopyroxene syenogranite to granite (comp. Pehrsson et al., 2003)

Summerford Group

Mafic pillow lava, breccia and agglomerate; limestone lenses, discontinuous limey tuff and arkose; silty and crystalline limestone (comp. Williams et al., 1985)

Early to Middle Ordovician Mary Ann Lake granite

Weakly to strongly foliated, medium-grained, white to buff, equigranular, two-feldspar, biotite granite and granodiorite commonly containing psammite, semipelite and amphibolite xenoliths; commonly rust coloured where biotite-rich psammite xenoliths are abundant; granite dated by U/Pb (zr) at 463 +6/-4 Ma

Otter Pond complex

Massive to weakly foliated, buff to pink, fine- to medium-grained, hornblende +/- biotite granodiorite to tonalite; massive to foliated gabbro to diorite, characteristically containing brown hornblende oikocrysts and phenocrysts (comp. van Staal et al., in

Conglomerate and sandstone containing a large

Grapnel gabbro

Medium-grained, massive, hornblende-biotite gabbro

locally, garnet xenocrysts (comp. Currie and Williams,

Vesicular, pyroxene -plagioclase, porphyritic diorite; autobrecciated diorite containing ophitic pyroxene, hornblende and feldspar megacrysts; local swarms of diabase dykes; bedded pillow lava and pillow breccia containing interstratified, epiclastic sandstone that grades to green argillite (Dickson et al., 2000)

Equigranular or locally megacrystic, mylonitic to weakly foliated, medium-grained, grey, pink or red, biotite granite and granodiorite (comp. Colman-Sadd, 1987)

Intrusions into the Roberts Arm Group, including coarse-grained, pyroxene (hornblende) gabbro and equigranular, hornblende quartz diorite (comp. Dickson,

Roberts Arm Group

Pillow lava, breccia, massive flows, minor mafic pyroclastic rocks, bedded chert, and trondjemite (Evans et al., 1994a)

pyroclastic rocks; volcaniclastic sedimentary rocks,

Mafic pillow lava, pillow breccia, agglomerate and tuff;

felsic lava and pyroclastic rocks; shale, argillite,

greywacke and chert (comp. Williams et al., 1985)

Buchans Group

O:B minor chert and iron formation (comp. Williams et al., Catchers Pond Group

Catchers Pond Group? Basaltic pillow lava, intermediate to mafic tuffaceous rocks and massive flows, chert, argillite and iron

granite (comp. Whalen, 1993a) Massive to foliated tonalite, granodiorite, diorite,

gabbro, amphibolite and minor granite and gneiss;

contains rare inclusions of ultramafic rocks (comp.

O:HM

Mafic to intermediate pillow lava, agglomerate and tuff; lesser amounts of greywacke, argillite, shale, chert, limestone and felsic pyroclastic rocks; unseparated diabase, gabbro and intrusive dacite (comp. Kean et al.,

Chanceport Group Pillowed and massive basalt, containing horizons of volcanic breccia, conglomerate and sandstone, and

and iron formation (comp. Kean et al., 1994b)

Basaltic pillow lava, mafic tuff, breccia, chert, argillite

Cottrells Cove Group

Dark green pillow lava, mafic agglomerate and pillow breccia; felsic tuff and agglomerate with interbedded grey and red chert and siliceous argillite; reddish-brown feldspathic wacke interbedded with grey siliceous argillite and minor red argillite (O'Brien, 1990a)

Exploits Group

O:L

sequences of sandstone, shale and siltstone, argillite, chert, conglomerate and olistostromes (comp. Williams et al., 1985)

(Dickson, 2000c)

proportion of ophiolitic clasts (comp. various sources)

Coaker porphyry Quartz porphyry containing ultramafic inclusions and,

(comp. Hibbard and Williams, 1979)

Puncheon diorite

O:CK

Zoned intrusion of gabbro, diorite and monzonite (Currie and Williams, 1995) Phillips Head Igneous Complex

O:PH

Snowshoe Pond granite

Skidder basalt

O:Sk

Mafic, intermediate and felsic submarine flows and

Mafic pillow lava and agglomerate, felsic agglomerate and tuff, felsic lava, and thin beds of chert and limestone (Williams et al., 1985)

formation (comp. Kean et al., 1994b)

Halfway Mountain granodiorite Slightly foliated, white to beige, medium- to coarsegrained, biotite-amphibole subsolvus granodiorite to

Hungry Mountain Complex

Williams et al., 1985) Cutwell Group

Cutwell Group?

lenses of chert; green and red siltstone, shale and turbiditic sandstone; felsic agglomerate and bedded tuff (comp. Williams and Currie, 1995)

Marine pillow lava and pyroclastic rocks, turbidite

O:E

Dunnage Melange



Blocks of mainly mafic volcanic rocks, gabbro, greywacke, limestone, micaceous sandstone and granite, in a chaotic matrix of black and green shale, argillite and pebbly mudstone (Williams et al., 1985)

Early Ordovician

Snooks Arm Group



Arc tholeitic pillow lava, pillow and talus breccia and associated mafic dykes; evolved tholeiitic pillow basalt and massive flows, alternating with calc-alkaline andesitic and dacitic pyroclastic rocks and minor rhyolitic tuff; interstratified sedimentary rocks including boulder conglomerate, turbiditic sandstone, siltstone, mudstone, ironstone and tuff (comp. Bedard et al., 2000)

Loon Pond - Woodfords Arm plutons

Quartz monzonite, granodiorite, granite, quartz diorite, diorite and various hybrid rocks (comp. Bostock, 1988)

Baggs Hill Granite



Foliated, equigranular granite and granodiorite; granophyre, quartz porphyry, quartz-feldspar porphyry

Partridgeberry Hills Granite Chloritized and sericitized, perthitic microcline, biotite



granite, locally strongly foliated; includes a high-silica phase of muscovite-biotite granite (comp. Colman-Sadd,

Hall Hill - Mansfield Cove Complex

Mafic and intermediate intrusive rocks, and plagiogranite; includes minor pyroxenite, granodiorite, alaskite, and pillow lava (comp. Swinden and Sacks,

Star Lake ophiolite complex



Local pods and dykes of pegmatitic hornblende diorite and fine-grained hornblende plagiogranite (tonalite) in diabase dyke complexes; sheeted, medium- to coarsegrained, pyroxene-hornblende gabbro, diorite, and fineto medium-grained, pyroxene-hornblende diabase; coarse- to very coarse-grained, layered pyroxenite (comp. Whalen, 1993a)

King George IV Lake Complex



Dark green, mafic pillow lava and minor pillow breccia; intercalated mafic tuffs and green and red chert; fine- to medium-grained, commonly sheeted, diabase dykes; medium-grained tonalite and trondhjemite; mediumgrained, equigranular, locally plagiophyric, gabbro; coarse-grained, melanocratic gabbro with local layering (comp. Kean, 1983)

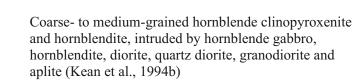
Annieopsquotch Complex



dykes and rare trondhjemite and breccia dykes; massive gabbro cut by diabase dykes and containing pods of trondhjemite and pegmatitic gabbro; layered clinopyroxene cumulates (comp. Dunning and Chorlton,

Basaltic pillow lava and minor red chert; sheeted diabase

Brighton gabbro



Glover Formation

Mafic and silicic volcanic rock and high level intrusions eO:V with minor volcaniclastic sedimentary rock (Cawood and van Gool, 1998)

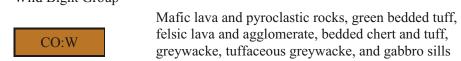
Late Cambrian to Late Ordovician Bay du Nord Group



Volcanic -sedimentary unit of diverse lithology, with metamorphic rocks predominating; metamorphic rocks include psammitic and semipelitic schist, phyllite and graphitic schist, quartz-biotite schist, amphibolite and migmatite; low grade parts consist of sandstone, siltstone, shale, conglomerate, and felsic volcanic rocks (comp. Williams et al., 1985)

Late Cambrian to Middle Ordovician

Wild Bight Group



felsic lava and agglomerate, bedded chert and tuff, greywacke, tuffaceous greywacke, and gabbro sills (Williams et al., 1985)

Gander River Complex



volcaniclastic rocks, trondhjemite and quartz porphyry (comp. Williams et al., 1985)

Ophiolite complex that includes pyroxenite, serpentinite,

magnesite, gabbro, talc/tremolite zones, mafic flows and



Ophiolite complex consisting of ultramafic rocks, including harzburgite and pyroxenite, gabbro, basalt and minor amphibolite (comp. various sources)

Coy Pond Complex

Ophiolite complex consisting of ultramafic rocks, including harzburgite and pyroxenite, gabbro, plagioganite, diabase, basalt, and minor sedimentary rocks (comp. various sources)

Pipestone Pond Complex



Ophiolite complex consisting of ultramafic rocks, including harzburgite and pyroxenite, gabbro, plagioganite, diabase, basalt, and minor sedimentary rocks (comp. Swinden, 1988)

Unnamed ophiolite (emplaced in Bay du Nord Group)



Metagabbro, layered metagabbro, metapyroxenite; metadiabase and volcanic rocks; genetically related amphibolite (Chorlton, 1980b)

Unnamed ophiolite (Exploits Subzone)



Ultramafic rocks, gabbro, trondhjemite, diabase, volcanic and sedimentary rocks of the ophiolite suite (comp. various sources)

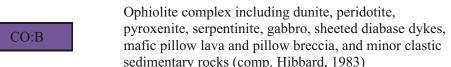
Unnamed ophiolite (emplaced in Gander Zone)

Ultramafic and gabbroic rocks occurring as small bodies locally within the Gander Zone and presumed to be tectonically emplaced (comp. various sources)

Cambrian to Ordovician

Betts Cove Complex

CO:A



Advocate Complex

Intensely dismembered and deformed mafic and ultramafic plutonic rocks, mafic volcanic and volcaniclastic rocks, and dark grey to black slates (Hibbard, 1983)

Point Rousse Complex

Pillow lava, mafic volcaniclastic rocks, and minor chert, marble and iron formation; sheeted diabase dykes, CO:R gabbro and metagabbro, and serpentinized and altered ultramafic rocks (comp. Hibbard, 1983)

Pacquet Harbour Group

CO:Q

Pillow lava, pillow breccia, and other mafic volcanic, volcaniclastic rocks and diabase dykes; minor felsic volcaniclastic rocks, possibly including tuffs or flows; minor gabbro intrusions (comp. Hibbard, 1983)

Unnamed ophiolite (emplaced in Fleur de Lys Supergroup)

Serpentized ultramafic rock tectonically included in the Fleur de Lys Supergroup (comp. various sources)

volcanic and sedimentary rocks of the ophiolite suite

Unnamed ophiolite (Notre Dame Subzone) Ultramafic rocks, gabbro, trondhjemite, diabase,

(comp. various sources) South Lake Igneous Complex

CO:ON

Coarse- to medium-grained tonalite, hornblende diorite, CO:SL massive and layered gabbro, and sheeted dykes (comp. MacLachlan and Dunning, 1998)

Roebucks Brook intrusions

Quartz monzonite, granodiorite, quartz diorite, diorite and gabbro (comp. Kean, 1982)

Intermediate intrusive rock (O'Neill, 1991a)

Victoria Lake Supergroup

Mafic to felsic flows and pyroclastic volcanic rocks, pillow lava, and epiclastic volcanic rocks; greywacke, CO:V siltstone, shale and minor limestone lenses (Williams et al., 1985)

granodiorite; migmatites

Spruce Brook Formation

CO:S

Quartzitic sandstone, siltstone, shale and minor conglomerate; metamorphic and migmatitic equivalents (comp. Colman-Sadd, 1985a)

CO:gn

Migmatitic, interbanded, sillimanite schist, amphibolite and granitic gneiss (Colman-Sadd and Russell, 1988) Foliated, feldspar megacrystic to coarse grained

porphyritic and equigranular biotite granite and

CO:gm

Gander Group CO:G

Mainly psammite with interbedded semipelite and pelite, includes minor quartzite, mafic tuff, amphibolite and conglomerate. (Gradational metamorphic contact with Square Pond Gneiss)

Hare Bay Gneiss

CO:HB

Fine to medium grained, crudely layered tonalitic migmatite with amphibolite and paragneiss inclusions; derived from Square Pond Gneiss

Square Pond Gneiss CO:SP

Gray, fine grained psammitic and semipelitic parageniss and schist ("pinstripe" banding); locally migmatitic. (Gradational contact with Hane Bay Gneiss along a migmatite front)

Early Cambrian to Middle Ordovician

Western Arm Group CO:E

Submarine mafic to intermediate pillow lava, tuff, agglomerate, and associated diabase and gabbro; minor felsic tuff; chert and argillite (comp. Williams et al.,

Moretons Harbour Group

CO:M

Mafic pillow lava, pillow breccia, aquagene tuff, mafic to felsic dykes, and minor chert (comp. Williams et al.,

CO:m

Diabase and foliated amphibolite, probably derived from mafic dykes and intrusions into the Spruce Brook Formation (comp. Colman-Sadd, 1987)

Early to Middle Cambrian Twillingate pluton

> C:T Sleepy Cove Group

Foliated to mylonitic, grey to pink, medium- to coarsegrained tonalite and trondhjemite; contains lenses and dykes of amphibolite (comp. Williams and Currie, 1995)

Pillow lava, and local pillow breccia and massive flows;

silicic and mafic tuff and agglomerate; includes unseparated intrusions of gabbro, diorite and quartz diorite; metamorphism has created chloritic and amphibolitic assemblages in mafic rocks and the group is deformed and schistose in most places (comp. Williams and Payne, 1975)

Lushs Bight Group

Mafic volcanic rocks, principally pillow lavas, and sheeted mafic dykes; lesser amounts of pillow breccia, C:L tuff, agglomerate and chert; small gabbro intrusions and ultramafic bodies (comp. various sources)

Lushs Bight Group?

C:L?

Magnesite, talc-carbonate, actinolite-tremolite (altered ultramafic rock) (Kean et al., 1994b)

Late Neoprotorozoic to Cambrian

Youngs Cove Group



Shallow marine sedimentary rocks including grey siltstone and sandstone, white orthoquartzite, red, green and black shale, and minor grey and pink limestone (comp. O'Brien, 1998)

Late Neoprotorozoic Long Harbour Group

N:LH

Subaerial rhyolite, andesite and basalt, and related pyroclastic rocks; minor pillow basalt; marine sandstone and shale; red subaerial conglomerate, sandstone, siltstone and related siliclastic rocks (comp. O'Brien,

Musgravetown Group

N:Ms

Undivided thick succession of red and green, fine- to coarse-grained, sandstone, conglomerate, siltstone and shale: minor silicic and mafic volcanic rocks

Love Cove Group

N:LC

Chloritic and sericitic schist derived from felsic and mafic lavas and pyroclastics, conglomerate, sandstone and shale. (maybe deformed and metamorphosed equivalent of Musgravetown Group)

Equigranular, medum-grained, chlorite granite, intruded by mafic dykes (Colman-Sadd, 1987)

Medium- to coarse-grained diorite (Evans et al., 1994c)

Valentine Lake Quartz Monzonite

Quartz-porphyritic quartz monzonite, granodiorite and quartz diorite; lesser amounts of diorite and gabbro; minor pyroxenite (comp. Kean, 1982)

Pink, medium-grained granite with minor mafic phases

monzonite and granodiorite; lesser amounts of medium-

to coarse-grained gabbro and diorite (comp. Evans et al.,

Lemotte's Lake Granite

Crippleback Lake Quartz Monzonite Medium- to coarse-grained, locally porphyritic, quartz

and xenoliths (Kean and Mercer, 1981)

Grole Intrusive Suite



Unseparated black and dark green to grey, medium- to coarse-grained gabbro and grey, medium-grained, locally banded, quartz diorite and diorite; minor granodiorite and pink granite, the latter occuring mainly as net veins (O'Brien, 1998)



Pink to orange, medium-grained, equigranular granite; buff to grey granodiorite and minor unseparated felsite; grey to green, medium-grained diorite (O'Brien, 1998)

Dark grey, green, black, and black and white, medium-

to coarse-grained and pegmatitic gabbro (O'Brien, 1998)

Harbour Breton Granite

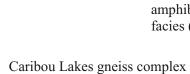


Pink, medium- to coarse-grained, mainly equigranular, biotite granite; minor porphyritic hornblende granite, fine-grained, plagiophyric monzogranite, and mediumto coarse-grained, porphyritic hornblende-biotite granite (comp. O'Brien, 1998)

Dominantly metaclastic schists with interlayered amphibolite and greenschist; the supergroup has been polydeformed by up to three major deformations;

Neoproterozoic to Early Ordovician

Fleur de Lys Supergroup



N-O:C

N-O:F

metamorphism is in the upper greenschist or lower amphibolite facies, or locally in the middle amphibolite facies (comp. Williams et al., 1985)

granodioritic to quartz monzonitic orthogneiss; gneissic,

Biotite-muscovite, migmatitic paragneiss and

biotite-amphibole granodiorite (Whalen, 1993a)

Little Passage Gneiss



Medium- to coarse-grained semipelitic and psammitic paragneiss and schist, and finer grained psammitic gneiss; tonalitic migmatite; massive and banded amphibolite, occurring especially as inclusions in migmatite; the rocks contain amphibolite facies metamorphic assemblages, are intruded by unseparated granite veins, and are locally mylonitic. Generation of migmatite is dated at 423 +5/-3 Ma using U/Pb in zircon (Colman-Sadd and O'Driscoll, 1979; Dunning et al.,

Neoproterozoic to Late Cambrian

La Poile Basement Rocks (low grade)

NC:A

stratified, quartz-rich sandstone; green and grey, laminated argillite and thin-bedded siltstone; quartz pebble conglomerate and polymictic cobble conglomerate; dark green, lithic tuff and minor mafic agglomerate; blue quartz-bearing granodiorite and tonalite; granite porphyry; dark green, hornblende gabbro and diorite; minor pyroxenite and diabase dykes (comp. O'Brien, 1990b)

Banded amphibolitic gneiss, lit-par-lit migmatite,

(O'Brien, 1990b)

hornblendite and platy schist; subordinate hornblende

porphyry, metagabbro, granite porphyry and fine-grained

equigranular granitoid; amphibolitic gneiss, schist and

agmatite screens; fine-grained, nebulitic granite sheets

Grey and green-grey, thick- to thin-bedded, locally cross

Grey River Enclave

Cinq Cerf Gneiss

Neoproterozoic to Early Cambrian

Granitic and granodioritic gneiss; hornblende-biotite schist, migmatite, agmatite and amphibolite; semipelitic, pelitic and psammitic schist and phyllite, and felsic metavolcanic rocks; gabbro and prekinematic quartz veins; gneiss is dated by U/Pb zircon at 686 +33/-15 Ma and metavolcanic rocks at 544 +/- 5 Ma (comp. Dickson et al., 1996a; comp. Dunning and O'Brien, 1989)

Simmons Brook Intrusive Suite



Grey, medium-grained, equigranular, hornblende-biotite granodiorite and tonalite; dark grey to green, fine- to medium-grained diorite; medium- to coarse-grained gabbro (O'Brien, 1998)

Connaigre Bay Group



Marine, grey and green siltstone, sandstone and minor conglomerate and limestone; andesite, basalt, and mafic tuff and agglomerate; subaerial, red to purple, siltstone, sandstone and conglomerate; rhyolite and felsic tuff and breccia (comp. O'Brien, 1998)

Mafic tuff, tuffaceous sandstone and minor basalt;

metasedimentary and metavolcanic rocks, including

Connaigre Bay Group?



psammite, amphibolite and rare mylonitic paragneiss; minor unseparated granodiorite and diorite (comp. O'Brien, 1998)

Furbys Cove Intrusive Suite Pink to white, equigranular, blue-quartz-bearing granite;



N:T

Tickle Point Formation

Buff- to brown-weathering, pink to purple and green, felsic volcanic rocks, including massive and banded rhyolite flows and crystal and crystal-lithic felsic tuffs: minor basalt and andesite flows and interlayered,

granite porphyry; medium-grained, green to dark grey

quartz diorite; mafic and felsic dykes, and screens of

country rocks (comp. O'Brien, 1998)

Middle Mesoproterozoic Elsonian anorthosite suites



Coarse-grained, massive to well foliated, grey to bluish grey and buff anorthosite and gabbroic anorthosite, locally cut by mafic dykes, now amphibolite; layered gabbro and anorthositic gabbro, gradational with and related to anorthosite plutons (comp. Williams, 1985a)

tuffaceous sedimentary rocks; locally contains

unseparated diorite sills and plugs (O'Brien, 1998)

Early Mesoproterozoic to Early Cambrian

Late Paleoproterozoic to Early Mesoproterozoic

East Pond Metamorphic Suite

Psammitic and semipelitic schist and gneiss; migmatite, quartzofeldspathic gneiss and granitic gneiss; polymictic metaconglomerate (comp. Hibbard, 1983)

Long Range gneiss complex

PM:L

granodioritic, quartz dioritic, and tonalitic compositions; lesser amounts of amphibolite, and dioritic and mafic gneiss; screens of paragneiss, including metacarbonate rocks, pelitic gneiss, and quartzite; metamorphosed in the amphibolite and granulite facies (comp. Owen, 1991)

Mainly quartzo-feldspathic gneiss, including granitic-