PRELIMINARY GEOLOGICAL MAP of the EASTERN COBEQUID HIGHLANDS

Geology by:

Murphy, J.B.; Pe-Piper, G.; Nance, R.D.; Turner, D.; & Piper, D.J.W.

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Carboniferous or younger

COBEQUID MOUNTAINS

CUMBERLAND COUNTY
COLCHESTER COUNTY

FAULT

BROOK

ROCKLAND

FAULT

COBEQUID

Carboniferous

Carboniferous or younger

341± 4 Rw

331± 17 Rw

315± 25 Rw,mu

SUGARLOAF MTN

Cu, Zn, Pb

As, Au

clay

Th, V, La, Ce, U, Ag

Fe

Pb, Cu

diat

db

rock

Bedding, tops known (inclined, horizontal, overturned) .....
Bedding, tops unknown (inclined, vertical) .....
Flow layering in volcanic rocks .....
Geological boundaries (defined, approximate, assumed) .....
Unconformities (defined, approximate, assumed) .....
Faults (brittle, thrust, ductile); .....
arrows indicate direction of movement
Exposures (in place, volcanic rocks, float) ..... × V ⊗

STRUCTURAL SYMBOLS:

Schistosity, gneissocity (Precambrian) .....
Cleavage (penetrative, non-penetrative) (Precambrian) .....
Cleavage (Carboniferous) .....
Mineral lineation .....
Intersection lineation (bedding/cleavage, cleavage/cleavage)
Minor folds (S-sense, Z-sense, intrafolial) .....
Major folds (anticline, syncline, overturned syncline) .....
Fold axial traces (known, assumed); .....
arrow indicates direction of plunge
Diabase dyke ..... db
Granitoid dyke ..... g
Gravity anomily .....

RADIOMETRIC AGES: numbers refer to age date in Ma ..... 341±4 Rw
K: K/Ar system date; R: Rb/Sr system dates;
w: whole rock; m: mineral; mu: muscovite; b: biotite;
h: hornblende.

FOSSIL LOCALITIES ..... F

MINERAL OCCURANCES ..... •Au

Cu - copper	U - uranium	diat - diatomite
Pb - lead	Th- thorium	clay - clay
Zn - zinc	F - fluorine	rock - rip rap, road metal
As - arsenic	La- lanthanum	
Au - gold	V - vanadium	
Fe - iron	Ag- silver	

We wish to acknowledge the mapping of Howard Donohoe and Peter Wallace in this area (1982), without which, this study could not have been accomplished.

Stratigraphy modified after Donohoe and Wallace (1982)

		NORTH	SOUTH
	11	Devono-Carboniferous plutons	(a) gabbro, diorite (b) granite
DEV-CARB	9	Fountain Lake Group (a) mafic (b) felsic (c) sediments	10 Nutby
DEV	8	Portapique River and Murphy Brook Formations	
SIL	7	Wilson Brook Formation	
ORD-	6a	Silurian volcanic rocks??	6 undivided
			5 Late Precambrian-Cambrian plutons (a) granite gneiss (b) granite (c) appinitic gabbro
HADR-YNIAN	4	(a) Jeffers Group (b) Warwick Mountain Formation (c) Dalhousie Mountain Volcanics	3 Folly River Formation
			unconformity
			2 Gamble Brook Formation (a) lower (b) upper
			unconformity ?
			1 (a) Mount Thom Complex (b) Great Village River Gneiss

0 1 2 3 4 5km

Scale: 1:50,000

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