

Description of Map Units
(not necessarily in stratigraphic order)

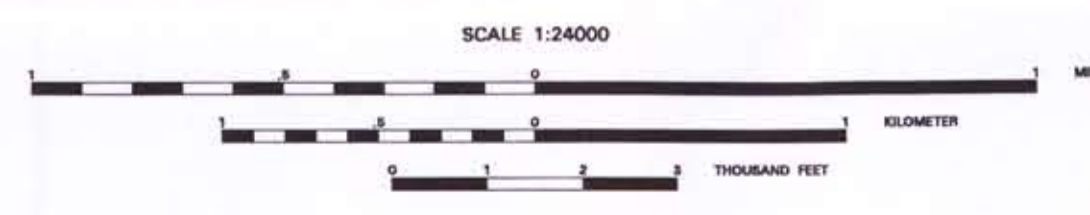
- Ki
Undifferentiated gabbro-diorite and syenite
- Kd
Camptonite and diabase dikes
- DEVONIAN INTRUSIVE ROCKS**
- Dg
Biotite-muscovite pegmatite or granite
- LOWER DEVONIAN WAITS RIVER FORMATION**
- Dwr
Dark-gray biotite phyllite
- Dwrl
Rusty brown, deeply weathered beds of impure limestone
- Dwra
Amphibolite
- Dwrf
Felsic gneiss and granofels
- UNDIFFERENTIATED UPPER SILURIAN TO LOWER DEVONIAN ROCKS**
- DScv
Interbedded amphibolite, quartzite and impure actinolitic limestone
- DSaq
Amphibolite and quartzite
- SObmf
ORDOVICIAN TO SILURIAN BARNARD GNEISS
Interlayered feldspar-biotite-quartz felsic gneiss to schist and hornblende-biotite mafic gneiss to schist and amphibolite
- ORDOVICIAN MORETOWN FORMATION**
- Omb
Rusty-brown to dark-gray phyllite or schist
- Ombq
Dark-gray, glassy to medium-gray quartzite
- Oml
Laminated gray-green quartz-plagioclase granofels
- Omgf
Light-rusty-tan weathering feldspathic schist and granofels
- Omq
Light-tan weathering feldspathic quartzite
- Omgs
Green muscovite-biotite-chlorite-quartz-plagioclase phyllonitic schist with hornblende and garnet
- Omg
Large-garnet biotite-plagioclase granofels
- Oma
Dark gray-green amphibolite
- Omd
Dioritic amphibolite
- UNDIFFERENTIATED LATE PROTEROZOIC TO ORDOVICIAN ULTRAMAFIC ROCKS**
- OZu
Talc schist and actinolitic greenstone
- MIDDLE PROTEROZOIC INTRUSIVE ROCKS OF THE MOUNT HOLLY COMPLEX**
- Yp
Biotite-chlorite-muscovite-epidote pegmatite
- Ygp
Plagioclase-rich granodiorite gneiss
- Yag
Aplitic gneiss
- Ygg
Granitic biotite-microcline-plagioclase-quartz gneiss
- Yt
Biotite tonalite and trondhjemite gneiss
- Yta
Plagioclase-augen gneiss and mylonite schist
- OTHER MIDDLE PROTEROZOIC ROCKS OF THE MOUNT HOLLY COMPLEX
CAVENDISH FORMATION**
- Ycg
Light-silvery-green biotite-muscovite-chlorite-garnet-quartz schist and plagioclase schist
- Ycfs
Dark-gray muscovite-biotite-plagioclase-quartz schist and granofels
- Yccm
Light-gray to white dolomite-calcite-quartz marble with actinolite, phlogopite, sulphides, and chlorite
- Yccs
Dark-green diopside-microcline-hornblende-calcite marble, and dull-gray phlogopite-scapolite(?) calcite marble
- OTHER ROCKS OF THE MOUNT HOLLY COMPLEX**
- Ybg
Biotite-quartz-plagioclase gneiss with pods of pegmatite, quartzite and amphibolite
- Ya
Amphibolite
- Yrq
Quartzite
- Yrg
Rusty weathering muscovite-biotite-plagioclase-quartz schist locally contains garnet and chlorite or rusty garnet-muscovite-biotite-quartz-plagioclase gneiss and quartz-ribbed gneiss
- Yrgt
Dark-gray, garnet-biotite-quartz-plagioclase schist to gneiss locally altered to chlorite-muscovite-quartz schist
- Ycs
Calc-silicate hornblende-diopside gneiss, amphibolite, and diopside-actinolite-quartz gneiss
- Ym
Calcite marble

Plates 1 and 2 are a paper representation of the digital bedrock geologic information for the Cavendish 7.5-minute quadrangle located in Windsor county, Vermont. All of the bedrock geology data were obtained from Ratcliffe (unpub. data), and were digitally compiled on a personal computer system using PC ARC/INFO version 3.40 Plus by Environmental Systems Research Institute, Inc. The data shown on Plate 1 were exported to ARC/INFO version 6.1 where solid color fill patterns were generated, and faults were drawn using symbols from a lineset (alcnew61.lin) from ALACARTE software (Fitzgibbon and Wentworth, 1991). The compilation procedures discussed in Walsh and others (1994) were used in the preparation of this report, with the exception of the topographic base. The topography was obtained from a photographic negative separate of contour lines from the Cavendish, Vermont (1972 edition) U.S.G.S. 7.5-minute topographic quadrangle. The negative was scanned on an IDEAL FSS 8000 raster-format scanner. The raster image was vectorized using GTX OSR Contour version 2.00 by GTX Corporation, Inc. and converted into a coverage in ARC/INFO version 6.1.

These plates are derivative products and should not serve as the primary source for the complete geologic information for this area; the correct reference should be number 2 below:

- Fitzgibbon, T.T., and Wentworth, C.M., 1991, ALACARTE user interface: AML code and demonstration maps, Version 1.0: U.S. Geological Survey Open-File Report 91-587.
- Ratcliffe, N.M., unpublished data, Bedrock geologic map of the Cavendish quadrangle, Windsor County, Vermont, scale 1:24000.
- Walsh, G.J., Ratcliffe, N.M., Dudley, J.B., and Merrifield, T., 1994, Digital bedrock geologic map of the Mount Holly and Ludlow quadrangles, Vermont: U.S. Geological Survey Open-File Report 94-229, scale 1:24000.

Topography from Cavendish, VT quadrangle (1972 edition)
Contour Interval 20 feet
Map projection is polyconic
Digital map units in State Plane Coordinate System
National Geodetic Horizontal Datum of 1927
Roads from Vermont Center for Geographic Information, Inc.



MN N
Approximate Mean Declination
15' West, 1972

Geology mapped by Ratcliffe in 1993.
Digitized by Gregory Walsh¹, Thomas Merrifield², and David Dreher³.



Digital Bedrock Geologic Map of the
Cavendish Quadrangle, Vermont

By
N.M. Ratcliffe¹

1995



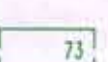

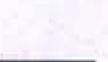
Explanation of Map Symbols

- Contacts
- Outcrops (areas of exposed bedrock examined in this study)
- Thrust fault, teeth on upper plate

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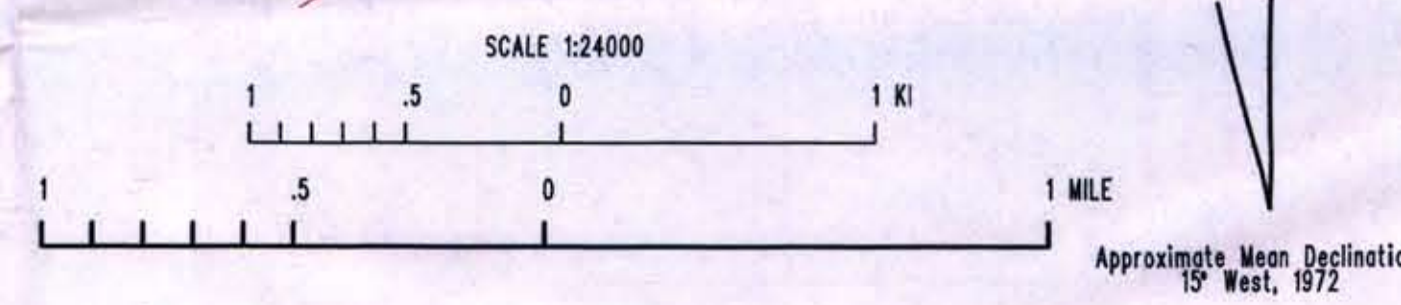
This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and with the North American Stratigraphic Code. Any use of trade names is for descriptive purposes only and does not imply endorsement by the U.S. Government.
This report is available from the Vermont Geological Survey, Office of Information Management Services, telephone (802) 241-3488.

Explanation of Map Symbols

- Foliation
-  Strike and dip of inclined foliation on interpretive form-lines
 -  Strike and dip of vertical foliation on interpretive form-lines
- Cleavage
-  Strike and dip of inclined cleavage
 -  Strike and dip of vertical cleavage
- Thrust Faults
-  Strike and dip of thrust fault, teeth on upper plate



Topography from Cavendish, VT quadrangle (1972 edition)
Contour interval, 20 feet
Map projection is polyconic
Digital map units in State Plane Coordinate System
National Geodetic Horizontal Datum of 1927
Roads from Vermont Center for Geographic Information, Inc.



Geology mapped by Ratcliffe in 1993.
Digitized by Gregory Walsh, Thomas Merrifield, and David Dreher.



LOCATION OF MAP

Digital Bedrock Geologic Map of the
Cavendish Quadrangle, Vermont

By

N.M. Ratcliffe¹

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