

Description of Map Units  
(not necessarily in stratigraphic order)

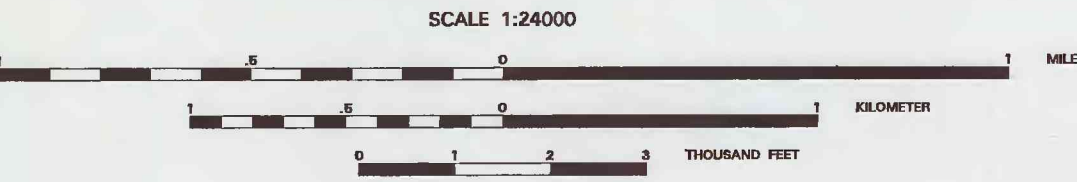
- CRETACEOUS INTRUSIVE ROCKS**
- Ki Undifferentiated gabbro-diorite and syenite
  - Kd Camptonite and diabase dikes
- DEVONIAN INTRUSIVE ROCKS**
- Dg Biotite-muscovite pegmatite or granite
- LOWER DEVONIAN WAITS RIVER FORMATION**
- Dwr Dark-gray biotite phyllite
  - Dwrl Rusty brown, deeply weathered 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
- ORDOVICIAN TO SILURIAN BARNARD GNEISS**
- SObm 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
  - Yap 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 3.4D 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 Walsh, Thomas Merrifield, and David Dreher.

Digital Bedrock Geologic Map of the  
Cavendish Quadrangle, Vermont

By

N.M. Ratcliffe<sup>1</sup>

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 available from the Vermont Geological Survey, Office of Information Management Services, telephone (802) 241-3488.