

**VERMONT GEOLOGICAL SURVEY**  
PUBLICATIONS LIST, 2020

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***\*NOTE: OUR PUBLICATIONS, EXCEPT FOR THE NEW BEROCK MAP, WERE LOST DURING THE FLOOD IN 2011. Most publications are available free of charge on our web site. Alternatively, plotted paper maps (not waterproof) and text may be purchased separately at listed prices. MANY additional resources are available on our web site, especially mapping projects related to groundwater. Most publications since 2000 have been prepared for web distribution.***

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May 2019

**VERMONT GEOLOGICAL SURVEY**

The Vermont Geological Survey is part of the Department of Environmental Conservation and is also known as the Division of Geology and Mineral Resources. The Survey, directed by the State Geologist, conducts surveys and research relating to the geology, mineral resources, and topography of the State. Published reports are prepared and made available for the public, consultants, industry, and government. The accumulation and dissemination of useful knowledge in packages ready for the consumer is one means to provide geologic aid and advice as required by statute. The development and working of rock and mineral deposits suitable for building, road making and economic and other purposes is a focus. Review of projects as they relate to Criteria 9D and E of Act 250 (Vermont's Land Use and Development Law) is an activity that recognizes the importance of lands with high potential for extraction of mineral and earth resources. With extraction goes the reclamation of lands in response to today's environmental concerns. A library of old and new information is maintained as per statute. In the event of any significant discovery of hydrocarbons in the State, the Survey provides geologic services for the Natural Gas and Oil Resources Board.

## HOW TO ORDER\*

**\*NOTE: OUR PUBLICATIONS, EXCEPT FOR THE NEW BEROCK MAP, WERE LOST DURING THE FLOOD IN 2011. Most publications are available free of charge on our web site. Alternatively, plotted paper maps (not waterproof) and text may be purchased separately at listed prices.**

To order, send us your name, mailing address, daytime telephone number and date. Indicate how many of each item you want, the item's name, the price of each and the total cost of each item. Add shipping and handling charges as per the chart below. Prepayment by check or money order in US funds is required. We cannot process credit card orders. Overpayments of \$1.00 or less will not be refunded. Please make check payable to the Vermont Geological Survey.

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\$0.01 - 5.00	\$2.00
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10.01-20.00	4.00
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40.01-50.00	7.00
50.01 & over	8.00

Maps are normally shipped folded. If you prefer, we can send some maps in cardboard map tubes. Each tube can accommodate several maps. Please add \$10.00 to your order for each map tube.

All prices are subject to change without notice. Except in the case of a processing error by the VGS, all sales are final.

Special Orders: Add 25% of the total order for foreign air mail return. Please allow two weeks for delivery.

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**VERMONT GEOLOGICAL SURVEY BULLETINS – Please view on-line. Alternatively, plotted paper maps (not waterproof) and text may be purchased separately at listed prices.**

**A Bulletin consists of illustrated text with bedrock geologic maps and cross-sections. Maps are at a scale of 1:62,500. Exceptions to this format are noted.**

- 1 Geology of the **Bradford-Thetford** area, Orange County, Vermont [VT part of Mt. Cube NH-VT 15' quadrangle], Jarvis V. Hadley, 36 p, 2 plates, 1950. Text: \$6.00; Map plates: \$10.00 each; or view/print on-line.
- 2 Stratigraphy and structure of the **Castleton** area, Vermont, Philip Fowler, 83p, 2 plates, 1950. Text: \$13.00; Map plates: \$10.00 each; or view/print on-line.
- 3 Geology of the **Memphremagog** quadrangle and the southeastern portion of the Irasburg quadrangle, Vermont, Charles G. Doll, 113 p, 1 plate, 1951. Text: \$20.00; Map plates: \$10.00 each; or view/print on-line.
- 4 A study of **Lakes in Northeastern Vermont** [Lake depths and bottom topography; maps at various scales], John Ross Mills, 54 p, 14 plates, 1951. Text: \$9.00; Map plates: \$10.00 each; or view/print on-line.
- 5 The Green Mountain anticlinorium in the vicinity of Rochester **and East Middlebury**, Vermont [East Middlebury VT, Bread Loaf VT, and Hancock VT, 7.5' quadrangles], Philip Henry Osberg, 127 p, 2 plates, 1952. Text: \$21.00; Map plates: \$10.00 each; or view/print on-line.

- 6 The geology of the **Rutland** area, Vermont, William F. Brace, 120 p, 3 plates, 1953. Text: \$20.00; Map plates: \$10.00 each; or view/print on-line.
- 7 The geology of the **Bennington** area, Vermont [Bennington VT 15' quadrangle and VT part of Hoosick NY-VT 15' quadrangle], John A. MacFadyen, Jr., 72 p, 3 plates, 1956. Text: \$12.00; Map plates: \$10.00 each; or view/print on-line.
- 8 The geology of the **Lyndonville** area, Vermont [Lyndonville VT 15' quadrangle], John G. Dennis, 98 p, 3 plates, 1956. Text: \$16.00; Map plates: \$10.00 each; or view/print on-line.
- 9 The geology of the limestone of **Isle La Motte and South Hero Island**, Vermont, Robert B. Erwin, 94 p, 3 plates, 1957. Text: \$15.00; Map plates: \$10.00 each; or view/print on-line.
- 10 Bedrock geology of the **East Barre** area, Vermont, Varanasi R. Murthy, 121p, 3 plates, 1957. Text: \$20.00; Map plates: \$10.00 each; or view/print on-line.
- 11 Geology of the **Concord-Waterford** area, Vermont [VT part of the Littleton VT-NH 15' quadrangle], John H. Eric & John G. Dennis, 66 p, 3 plates, 1958. Text: \$11.00; Map plates: \$10.00 each; or view/print on-line.
- 12 Geology of the **Mount Mansfield** quadrangle, Vermont, Robert A. Christman, 75 p., 3 plates, 1959. Text: \$12.00; Map plates: \$10.00 each; or view/print on-line.
- 13 The geology of the **St. Johnsbury** quadrangle, Vermont and New Hampshire, Leo M. Hall, 105 p, 5 plates, 1959. Text: \$17.00; Map plates: \$10.00 each; or view/print on-line.
- 14 Bedrock geology of the **Central Champlain Valley** of Vermont [VT part of Port Henry NY-VT 7.5x15' quadrangle and part of Ticonderoga VT-NY 15 quadrangle], Charles W. Welby, 296 p, 5 plates, 1961. Text: \$50.00; Map plates: \$10.00 each; or view/print on-line.
- 15 Geology of the **Camels Hump** quadrangle, Vermont, Robert A. Christman and Donald T. Secor, Jr., 70 p., 3 plates, 1961. Text: \$11.00; Map plates: \$10.00 each; or view/print on-line.
- 16 Geology of the **Plainfield** quadrangle, Vermont, Donald H. Konig, 86 p., 1 plate, 1961. Text: \$14.00; Map plates: \$10.00 each; or view/print on-line.
- 17 The Green Mountain anticlinorium in the vicinity of **Wilmington and Woodford**, Vermont [Wilmington VT 15' quadrangle & south to Mass. border, and eastern quarter of Bennington VT 15' quadrangle], James W. Skehan, S.J., 159 p., 3 plates, 1961. Text: \$27.00; Map plates: \$10.00 each; or view/print on-line.
- 18 Geology of the **Equinox** quadrangle and vicinity, Vermont, Philip C. Hewitt and Richard F. LaBrake, 83 p., 6 plates, 1961. Text: \$13.00; Map plates: \$10.00 each; or view/print on-line.
- 19 The Glacial **Geology of Vermont**, David P. Stewart, 124 p., 2 plates, 1961. Text: \$21.00; Map plates: \$10.00 each; or view/print on-line.
- 20 Geology of the **Island Pond** area, Vermont, Bruce K. Goodwin, 111 p., 3 plates, 1963. Text: \$18.00; Map plates: \$10.00 each; or view/print on-line.
- 21 Bedrock geology of the **Randolph** quadrangle, Vermont, Ernest Henry Ern, Jr., 96 p., 2 plates, 1963. Text: \$16.00; Map plates: \$10.00 each; or view/print on-line.
- 22 Geology of the **Lunenburg-Brunswick-Guildhall** area, Vermont, Warren I. Johansson, 86 p., 2 plates, 1963. Text: \$14.00; Map plates: \$10.00 each; or view/print on-line.
- 23 The geology of the **Enosburg** area, Vermont [Enosburg Falls VT 15' quadrangle and parts of Jay Peak VT 15 and St. Albans VT 7.5' quadrangles], John G. Dennis, 56 p., 3 plates, 1964. Text: \$9.00; Map plates: \$10.00 each; or view/print on-line.

- 24 The geology of the **Hardwick** area, Vermont, Ronald H. Konig and John G. Dennis, 57 p., 2 plates, 1964. Text: \$9.00; Map plates: \$10.00 each; or view/print on-line.
- 25 Stratigraphy and structure of a portion of the **Castleton** quadrangle, Vermont [parts of Castleton VT 15' quadrangle, including Poultney VT and West Rutland VT 7.5' quadrangles, and part of Proctor VT 7.5' quadrangle], E-an Zen, 70 p., 2 plates, 1964. Text: \$11.00; Map plates: \$10.00 each; or view/print on-line.
- 26 The geology of the **Milton** quadrangle, Vermont, Solon W. Stone and John G. Dennis, 79 p., 1 plate, 1964. Text: \$13.00; Map plates: \$10.00 each; or view/print on-line.
- 27 Geology of the Vermont portion of the **Averill** quadrangle, Vermont [VT part of Averill VT-NH 15' quadrangle], Paul Benton Myers, Jr., 69 p., 2 plates, 1964. Text: \$11.00; Map plates: \$10.00 each; or view/print on-line.
- 28 The geology of the **Burke** quadrangle, Vermont, Bertram G. Woodland, 151 p., 5 plates, 1965. Text: \$25.00; Map plates: \$10.00 each; or view/print on-line.
- 29 Bedrock geology of the **Woodstock** quadrangle, Vermont, Ping Hsi Chang, Ernest H. Ern, Jr., and James B. Thompson, Jr., 65 p., 2 plates, 1965. Text: \$11.00; Map plates: \$10.00 each; or view/print on-line.
- 30 Bedrock geology of the **Pawlet** quadrangle, Vermont, Robert C. Shumaker and James B. Thompson, Jr., 98 plates, 1967. Text: \$16.00; Map plates: \$10.00 each; or view/print on-line.
- 31 The **Surficial Geology and Pleistocene History** of Vermont [Glacial geology of the state; can accompany the Surficial Geologic Map of Vermont], David P. Stewart and Paul MacClintock, 251 p., 1969. Text: \$42.00; Map plates: \$10.00 each; or view/print on-line.
- 32 Bedrock geology of the **Brattleboro** quadrangle, Vermont-New Hampshire, J. Christopher Hepburn, Newell J. Trask, John L. Rosenfeld, and James B. Thompson, Jr., 162 p., 2 plates, 1984. Text: \$27.00; Map plates: \$10.00 each; or view/print on-line.

**COMPLIMENTARY PUBLICATIONS** are available on-line at <http://www.anr.state.vt.us/dec/geo/genint.htm>  
**One copy of any given pamphlet may be obtained at no charge. For more than one copy of the same title, the cost is listed.**

Geology of Vermont, B. Doolan, 1996, from Rocks and Minerals Magazine, v.71., \$2.00

Geology of Vermont, B. Baldwin, 1982, from Earth Science, v. 35, no. 3, 5p., \$1.00

Active Mines and Quarries in Vermont, US Dept of Labor data, revised 8/2003, 6 p. , \$1.00

Gold In Vermont, various articles dating from the 1800s to the present which pertain to gold in Vermont, including prospecting information, revised 10/95, 34 p. , \$6.50

Geology for Children and the Layman/Common Vermont Minerals and Rocks, revised 1999, a list of basic publications and favorite internet sites; a list of Vermont minerals and rocks, 2 p.

Vermont Rockhounding, a guide for amateur rock and fossil collectors, revised 1994, 10 p., \$1.50

A Brief Fossil History of Vermont, by Jeff Howe (former curator, Perkins Museum of Geology, University of Vermont), 1993, 3 p. , \$2.40

Oil and Gas in Vermont, various articles dating from the 1950s to the present on oil and gas in Vermont, revised 1989, 29 p. , \$6.00

Earthquakes in Vermont, Educational Leaflet No. 1, 1998, 10 p., \$2.00

Geology of Vermont Lands, Educational Leaflet No. 2, 1998, 3 p., \$0.50

Specimen Collecting in Vermont, lists whose permission is needed to collect on private, state and federal lands

Glacial Drift Sheets and Ice Directions, 22"x14.5", 1970. (on-line only)

Generalized Geologic Map of Vermont postcard, \$1.00

Generalized Geologic Map of Vermont, 8.5"x11", 1970.

**ECONOMIC GEOLOGY- Please view on-line. Alternatively, plotted paper maps (not waterproof) and text may be purchased separately at listed prices. Maps are black and white except as noted.**

**Economic Geology reports are detailed geologic reports on the geology, geophysics and/or geochemistry of specific mines, deposits and areas.**

- 1 A report on magnetic surveys of ultramafic bodies in the **Dover, Windham and Ludlow** areas, Vermont, Vincent J. Murphy, 54 p., 1966. \$9.00
- 2 Report on a resistivity survey of the **Monkton** kaolin deposit and drill hole exploration, Jason A. Wark, 31 p., 6 plates, 1968. Text: \$5.00; Map plates: \$10.00 each; or view/print on-line.
- 3 Geology and origin of the kaolin at **East Monkton**, Vermont, Duncan G. Ogden, 40 p., 1969. \$6.00
- 4 Report on the **Cuttingsville** pyrrhotite deposit, Cuttingsville, Vermont, Charles G. Doll, 8 p., 1969. \$1.00
- 5 The geology of the Elizabeth Mine, Vermont, [**Strafford**, VT], Peter F. Howard, 73 p., 28 plates, 1969. Download from our web site.
- 6 Magnetic surveys of ultramafic bodies in the vicinity of **Lowell**, Vermont, Vincent J. Murphy and Andrew V. Lacroix, 40 p., 2 plates, 1969. Text: \$6.00; Map plates: \$10.00 each; or view/print on-line.
- 7 Geochemical investigations in **Essex and Caledonia Counties**, Vermont, Raymond W. Grant, 8 p., 2 plates, 1970. Text: \$1.00; Map plates: \$10.00 each; or view/print on-line.
- 8 Geochemical investigation of the Pomfret Dome, Vermont [**Pomfret and Hartford** VT], John E. Thresher, Jr., 31 p., 1972. \$5.00

## **ENVIRONMENTAL GEOLOGY**

**Environmental geology reports are generalized and simplified versions of surficial and bedrock geology, prepared for planning and other interests. Conditions are determined chiefly on the basis of surficial materials and include the following maps:**

- surficial (glacial and recent) deposits
- bedrock (except for Environmental Geology #1)
- groundwater potential
- solid waste disposal conditions
- septic tank (sewage disposal) conditions
- general construction conditions
- sand and gravel reserves

- 1 Geology for environmental planning in the Barre-Montpelier region, Vermont, David P. Stewart, 32 p., 5 plates, 1971, (does not include bedrock map). Text: \$5.00; Map plates: \$10.00 each; or view/print on-line.

- 2 Geology for environmental planning in the Rutland-Brandon region, Vermont, David P. Stewart, 49 p., 7 plates, 1972. Text: \$8.00; Map plates: \$10.00 each; or view/print on-line.
- 3 Geology for environmental planning in the Burlington-Middlebury region, Vermont, David P. Stewart, 51 p., 7 plates, 1973. Text: \$8.00; Map plates: \$10.00 each; or view/print on-line.
- 4 Geology for environmental planning in the Johnson-Hardwick region, Vermont, Frank N. Wright, III, 64 p., 7 plates, 1974. Text: \$10.00; Map plates: \$10.00 each; or view/print on-line.
- 5 Geology for environmental planning in the Milton-St. Albans region, Vermont, David P. Stewart, 54 p., 7 plates, 1974. Text: \$9.00; Map plates: \$10.00 each; or view/print on-line.
- 7 Geology for environmental planning in the Brattleboro-Windsor region, Vermont, David P. Stewart, 54 p., 7 plates, 1975. Text: \$9.00; Map plates: \$10.00 each; or view/print on-line.

NOTE: Environmental Geology #6 was never published

#### GENERAL INTEREST PUBLICATIONS

**Bedrock Geologic Map of Vermont, 2011**, by N.M. Ratcliffe, R.S. Stanley, M.H. Gale, P.J. Thompson and G.J. Walsh, USGS Scientific Investigations Map 3184, 3 sheets, scale 1:100,000. \$36.00.

Centennial Geologic Map of Vermont on CD-ROM., Compiled and edited by Charles G. Doll, scale 1:250,000, Jpg files and plot files. CD: \$10.00 or view on-line.

Surficial Geologic Map of Vermont on CD-ROM, Compiled and edited by Charles G. Doll, scale 1:250,000, 42"x48.5", 1970. CD: \$10.00 or view on-line.

Radioactivity Map of Vermont, 1980, compiled and edited by C.A. Ratte and Diane M. Vanecek, scale 1:250,000, 42"x24", 11 p. text plus 3 plates. \$31.00 or view/print on-line.

Compilation and Assessment of Radioactivity Data in Vermont, Compiled by Jonathan Kim, 2002, 9 plates.

Sand and Gravel Resource Map of Vermont, compiled by John Dudley, details sand and gravel deposits, land use exclusion areas, lakes and ponds, 1:250,000, 2 24.5"x36" sheets, 1993, pub. by New England Governors' Conference. View/download/print on-line.

Metallic and Non-Metallic Mineral Resources of Vermont, compilations of Mineral Resources Data System Sites. There are 726 records of non-metallic and metallic sites in Vermont. The data was updated in 1998 and is sorted by town in a bound volume. Available as database on cd rom for \$10.00 or on interactive web site.

A History of the Vermont Geological Surveys and State Geologists, T.D. Seymour Bassett, 39 p., 1976. \$6.00

#### **OPEN-FILE GEOLOGIC MAPS AND DIGITAL DATA: MOST OF THESE MAPS ARE AVAILABLE FREE IN PDF FORMAT ON OUR WEB SITE.**

**Open file reports and maps are preliminary and have not been reviewed for conformity with Vermont Geological Survey editorial standards. Reports are black and white unless otherwise indicated.**

Digital data (GIS shapefiles) links to VCGI are provided on our web site. Most recent GIS as geodatabase files are at: <http://anrmaps.vermont.gov/websites/geology/>

#### **2020**

#### **2019**

**VG2019-1** Wright, S., 2019, Surficial geology and groundwater hydrology of the Richmond quadrangle, Vermont: Vermont Geological Survey Open File Report VG2019-1, scale 1:24,000, Report plus 5 plates.. GIS Data.

**VG2019-2** Kim, J., Young, P., and Peterson, N., 2019, Bedrock Zones in Vermont and Radon in Air Test Points and Statistics: Vermont Geological Survey Open File Report VG2019-2, Readme file, Plate 1 and Plate 2.

**VG2019-3** Springston, G., 2019, Surficial geology and hydrogeology of the Huntington 7.5 Minute Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2019-3, scale 1:24,000, Report and Map. GIS data.

**VG2019-4** Van Hoesen, J., 2019, Surficial geology and hydrogeology of the northern half of the Proctor 7.5 Minute Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2019-4, scale 1:24,000, Report plus 9 plates.

**VG2019-4A**, Van Hoesen, J., 2019, Surficial geologic map of the Proctor 7.5 Minute Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2019-4A, scale 1:24,000. GIS data.

**VG2019-5** Springston, G., Landslide Inventory of Orange County, Vermont: Vermont Geological Survey Open File Report VG2019-5, Report and Map.

## 2018

**VG2018-1** Springston, G.S., 2018, Surficial Geologic Map of the Barre East 7.5 Minute Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2018-1, scale 1:24,000, Report and 4 plates. GIS Data.

**VG2018-2** Van Hoesen, J., 2018, Surficial Geology and Hydrogeology of the southern half of the Proctor 7.5 Minute Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2018-2, scale 1:24,000, Report plus 10 plates

**VG2018-3** Springston, G.S., 2018, Surficial Geology and Hydrogeology of the Joes Pond 7.5 Minute Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2018-3, scale 1:24,000, Report plus 8 plates. GIS Data.

**VG2018-4** Wright, S., 2018, Surficial Geology and Hydrogeology of the Bolton Mountain Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2018-4, scale 1:24,000, Report and 5 plates. GIS Data.

**VG2018-5** Wright, S., and Dowey, C. W., 2018, Surficial Geology and Hydrogeology of the Jeffersonville Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2018-5, scale 1:24,000, 4 plates. This supersedes the maps of VG01-2. GIS Data.

**VG2018-6** Springston, G., 2018, Landslide Inventory of Chittenden County, Northwest Vermont [Report, Map]: Vermont Geological Survey Open File Report VG2018-6.

**VG2018-7** Maguire, H., Mehrtens, C., Kim, J., Romanowicz, E., 2018, Lower Cambrian Gamma Log Data from Wells in Western Vermont and Northeastern New York: Vermont Geological Survey Open File Report VG2018-7, 2 plates, Well Log Data (xlsx).

**VG2018-8** Maguire, H., Mehrtens, C., Chiarenzelli, J., Webb, L., 2018, Detrital Zircon Ages for the Cambrian Monkton and Danby Formations, Champlain Valley, Vermont: Vermont Geological Survey Open File Report VG2018-8, 2 plates.

## 2017

**VG2017-1** DeSimone, D. J., 2017, Surficial Geology of the Bennington Area, Vermont: Vermont Geological Survey Open-File Report VG2017-1, 4 plates, scale 1:12,000. GIS Data.

**VG2017-2** Thompson, P. J., and Thompson, T. B., 2017, Bedrock Geologic Map of the Mount Mansfield 7.5 Minute Quadrangle, Vermont: VGS Open File Report VG2017-2, 3 plates, scale 1:24,000. Supersedes VG99-3. GIS Data.

**VG2017-3** Kim, J. J., and Dowey, C. W., 2017, Derivative maps generated from water well data logs in the Bennington area, Vermont: Vermont Geological Survey Open File Report VG2017-3, 4 Plates, scale 1:12,000.

**VG2017-4A** Kim, J. J., 2017, Preliminary Bedrock Geologic Map of the Bennington Area, Vermont: Vermont Geological Survey Open File Report VG2017-4A, scale 1:12,000.

**VG2017-4B** Kim, J. J., 2017, (Draft) Preliminary Fracture Map of the Bennington Area, Vermont: Vermont Geological Survey Open File Report VG2017-4B, scale 1:12,000.

**VG2017-5** Wright, S., Surficial Geology and Hydrogeology of the Town of Weathersfield, Vermont: Vermont Geological Survey Open File Report VG2017-5, Report and 5 plates, scale 1:24,000. GIS data.

**VG2017-6** Springston G. and Dowe, C., Surficial Geologic Map of the Joes Pond Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2017-6, scale 1:24,000.

**VG2017-7** Springston, G., Landslide Inventory of Washington County, Central Vermont: Vermont Geological Survey Open File Report VG2017-7, Report and Map, scale 1:24,000.

**VG2017-8** Larsen, F. D., Surficial Geologic Map of the Northfield 7.5 Minute Quadrangle, Vermont: Vermont Geological Survey Open File Report VG2017-8.

## 2016

**VG2016-1** Springston, G., Kim, J., Gale, M. and Thomas, E., 2016, Geology and hydrogeology of the Town of Calais, Vermont: VGS Open File report VG2016-1, 8 color plates, scale 1:24,000. GIS data

**VG16-1** (poster) Chirigos, M, Kim, JJ, Klepeis, M, and Van Hoesen, J, 2016, Using photogrammetry to analyze structures in a tectonic sliver in the footwall of the Champlain Thrust, Shelburne, Vermont II: Vermont Geological Survey Open File Report VG16-1, 1 plate.

**VG2016-2** Van Hoesen, J., 2016, Surficial geology and hydrogeology of Monkton, Vermont: Vermont Geological Survey Open File Report VG2016-2, Text and 11 plates, scale 1:24,000. GIS data.

**VG2016-3** Springston, G., 2016, Surficial geology and hydrogeology of the Cabot 7 1/2 minute quadrangle, Vermont: Vermont Geological Survey Open File Report VG2016-3, text plus 9 plates, scale 1:24,000.

**VG2016-4** Springston, G., 2016, Final report on a landslide inventory of the Town of Highgate, Vermont Vermont Geological Survey Open File Report VG2016-4, text plus 6 plates, scale 1:24,000.

## 2015

**VG15-1** Kim, J and Springston, G, 2015, Report on aquifer and aquifer recharge mapping in the Town of Bristol, Vermont: Vermont Geological Survey Open File Report VG2015-1, text plus 8 plates, scale 1:24,000. Paper copy \$80.00.

**VG2015-2** Kim, J, Gale, M, Springston, G, Koteas, C, Defelice, C, and Saitta, N, 2015, Bedrock Geologic Map of the Southern Two-Thirds of the Woodbury Quadrangle, Vermont, Washington County, Vermont: Vermont Geological Survey Open File Report VG2015-2, scale 1:24,000. Paper copy \$10.00.

**VG2015-3** Springston, G, Thomas, E, and Kim, J, 2015, Surficial Geologic Map of the Southern Two-Thirds of the Woodbury Quadrangle, Vermont, Washington County, Vermont: Vermont Geological Survey Open File Report VG2015-3. Download Geodatabase at <http://anrmaps.vermont.gov/websites/geology/>. Paper copy \$10.00

## 2014

**VG14-1** Kim, J., Gale, M., Chu, K., Cincotta, M. and Cuccio, L., 2014, Bedrock Geologic Map of the northern portion of the South Mountain Quadrangle, Addison County, Vermont. Scale 1:24,000. \$10.00

**VG14-2** Springston, G., Thomas, E., and Kim, J., 2014, Surficial Geologic Map of the northern 2/3 of the South Mountain Quadrangle, Vermont. Scale 1:24,000. \$10.00

## 2013

**VG13-1** Kim, J., Weber, E., and Klepeis, K., 2013, Bedrock Geologic Map of the Bristol Quadrangle, Vermont. 2 color plates, scale 1:24,000. \$20.00



**VG13-2** Springston, G., and Kim, J., 2013, Surficial Geologic Map of the Bristol Quadrangle, Vermont: 1 plate, scale 1:24,000. \$10.00

**VG13-3** Lens, J., DeWolkar, M., Springston, G., and Becker, L., 2013, Seismic hazard for the Burlington and Colchester, Vermont USGS 7-1/2 minute quadrangles. Text (6 pages) and map. View online or order print-on-demand paper copy for \$10.00.

**VG13-4** Lens, J., DeWolkar, M., Springston, G., and Becker, L., 2013, Seismic hazard mapping for Williston, Vermont. Text and map. View on-line or order print-on-demand paper copy for \$10.00.

## 2012

**VG12-1** Wright, S., 2012, Surficial Geologic Map of the Pico Peak, Vermont Quadrangle. 1 color plate, plus report, scale 1:24,000. \$15.00

**VG12-3** Gale, M., Kim, J. and Ruksznis, A., 2012, Bedrock Geologic Map of the Essex Junction, Vermont Quadrangle, Vermont. 1 plate, scale 1:24,000. \$10.00

## 2011

**VG11-1** Van Hoesen, J., 2011, Surficial Geologic Map of the Town of Dover, Vermont: Vermont Geological Survey Open File Report VG11-1, 1 color plate, scale 1:24,000. \$10.00

**VG11-1b** Van Hoesen, J., 2011, Surficial Geology and Hydrogeology of the Town of Dover, Vermont: Vermont Geological Survey Open File Report VG11-1b, 8 color plates and Report, scale 1:24,000. \$80.00

**VG11-2** Wright, S., Larsen, F., Springston, G., and Gale, M., 2011, Surficial Geology and Hydrogeology of the Town of Randolph, Vermont, 6 color plates and report, scale 1:24,000. \$60.00

**VG11-3** Kim, J., and Ruksznis, A., 2011, Bedrock Geologic Map of the Plainfield Quadrangle, Washington County, Vermont (6 mb pdf), Structure Data-Plate 2 (1 mb pdf\_), scale 1:24,000. \$20.00

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- 5 Simplified lithotectonic synthesis of pre-Silurian rocks in **Western New England**, Rolfe S. Stanley and Nicholas Ratcliffe, 9 p., 2 plates, various scales, 1983. Text: \$1.00; Map plates: \$10.00 each; or view/print on-line.
- 6 Bedrock geology of the **Mount Abraham-Lincoln Gap** area, central Vermont [parts of Lincoln and Warren, VT], Sharon B. O'Loughlin and Rolfe S. Stanley, 29 p., 3 plates, scale 1:12,000, 1986. Text: \$4.00; Map plates: \$10.00 each; or view/print on-line.
- 7 Bedrock geology of the **Mount Grant-South Lincoln** area, central Vermont [part of Lincoln, VT], Eric T. Lapp and Rolfe S. Stanley, 27 p., 3 plates, scale 1:12,000, 1986. Text: \$4.00; Map plates: \$10.00 each; or view/print on-line.
- 8 Bedrock geology of the northern part of the **Lincoln Massif**, central Vermont [parts of Lincoln, Ripton, Middlebury and Bristol, VT], Vincent DelloRusso and Rolfe S. Stanley, 56 p., 4 plates, scales 1:24,000 and 1:12,000, 1986. Text: \$9.00; Map plates: \$10.00 each; or view/print on-line.
- 9 Stratigraphy and bedrock geology of the northwestern portion of the **St. Albans** quadrangle and the adjacent



**Highgate Center** quadrangle, Vermont, Charlotte J. Mehrtens and Rebecca J. Dorsey, 28 p., 3 plates, scales 1:24,000 and 1:12,000, 1987. Text: \$4.00; Map plates: \$10.00 each; or view/print on-line.

- 10 Bedrock geology of the **East Fletcher-Bakersfield** area, northern Vermont [parts of Bakersfield, Fletcher, and Cambridge, VT], Timothy D. Mock, 28 p., 3 plates, scale 1:12,000, 1989. Text: \$4.00; Map plates: \$10.00 each; or view/print on-line.
- 11 Stratigraphy and bedrock geology of parts of the **Colchester and Georgia Plains** quadrangles, northwestern Vermont, Charlotte J. Mehrtens and Mary A. Borre, 29 p., 2 plates, scale 1:24,000, 1989. Text: \$4.00; Map plates: \$10.00 each; or view/print on-line.
- 12 Bedrock geology of the **Camels Hump-Bolton Mountain** area, northcentral Vermont [parts of the Richmond, Huntington, Bolton Mountain and Waterbury 7.5' quadrangles], Peter J. Thompson and Thelma Barton Thompson, 32 p., 4 plates, scale 1:24,000, 1992. Text: \$5.00; Map plates: \$10.00 each; or view/print on-line.
- 13 Bedrock geology of the **Fayston-Buels Gore** area, central Vermont [parts of the Huntington, Mt. Ellen, and Waitsfield 7.5' quadrangles], Gregory J. Walsh, 74 p., 4 plates, scale 1:24,000, 1992. Text: \$12.00; Map plates: \$10.00 each; or view/print on-line.
- 14 Bedrock geology of parts of the **St. Albans and Georgia** 7.5' quadrangles, Charlotte J. Mehrtens and Ann C.H. Hadley, 18 p., 1 plate, scale 1:24,000, 1995. Text: \$3.00; Map plates: \$10.00 each; or view/print on-line.

## SPECIAL PUBLICATIONS

**Special Publications are illustrated booklets on topics of general interest.**

- 1 Paleontology of the Champlain basin in Vermont [Fossil descriptions and characteristics], Charles W. Welby, 87 p., 2 plates, 1962. Text: \$14.00; Map plates: \$10.00 each; or view/print on-line.
- 2 Mineral Collecting in Vermont, Raymond W. Grant, 49 p., 1968. Text: \$8.00; or view/print on-line.
- 3 Vermont handbook for soil erosion and sediment control on construction sites, 121 p., 1982. Text: \$20.00.

## STATE PARKS

**State Parks publications are illustrated booklets on the geology of some of the state parks and forests in Vermont for the general interest reader.**

The geology of Button Bay State Park, [Ferrisburg, VT], Harry W. Dodge, Jr., 25 p., 1962. \$4.00

The geology of Calvin Coolidge State Forest, [Plymouth, VT], Harry W. Dodge, Jr., 19 p., 1959. \$3.00

The geology of D.A.R. State Park, Mount Philo State Forest Park, Sand Bar State Park [Addison, Charlotte & Milton VT], Harry W. Dodge, Jr., 32 p., 1969. \$5.00

Geology of Darling State Park [Burke VT], Harry W. Dodge, Jr., 23 p., 1967. \$3.00

The Geology of Groton State Forest, Robert A. Christman, 23 p., 1956. \$3.00

The geology of Mt. Mansfield State Forest [Underhill and Stowe VT], Robert A. Christman, 27 p., 1 plate, 1956. Text: \$4.00; Map plates: \$10.00 each; or view/print on-line.

**STUDIES IN VERMONT GEOLOGY - Please view on-line. Alternatively, plotted paper maps (not waterproof) and text may be purchased separately at listed prices. Maps are black and white except as noted.**

**These studies are detailed geologic reports on specific areas of Vermont.**

- 1 The morphometry and recent sedimentation of **Joe's Pond, West Danville**, Vermont, John S. Moore and Allen

- S. Hunt, 16 p., 1970. \$2.00
- 2 Surficial geology of the **Brandon-Ticonderoga** 15 quadrangles, Vermont [VT parts of the Brandon VT and Ticonderoga VT-NY 15' quadrangles], G. Gordon Connally, 32 p., 1 plate, 1970. Text: \$5.00; Map plates: \$10.00 each; or view/print on-line.
  - 3 A comparison of fault zone fabrics in **Northwestern Vermont** [4 sites in Milton, Mechanicsville (Hinesburg), South Lincoln (Lincoln), and Jerusalem (Starksboro)], Barbara A. Strehle and Rolfe S. Stanley, 36 p., 4 plates, 1986. Text: \$6.00; Map plates: \$10.00 each; or view/print on-line.
  - 4 A rockfall and debris slide at **Smugglers Notch**, Mount Mansfield/Cambridge, VT, Charles A. Baskerville, Charles A. Ratte, and Fitzhugh T. Lee, 10 p., 1988. \$1.00

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**VG94-229A** 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 and explanation of the bedrock geology database in the Vermont Geographic Information System: USGS Open-File Report 94-229, 3 plates, scale 1:24000.

**VG94-654A** Walsh, G.J., and Ratcliffe, N.M., 1994, Digital bedrock geologic map of the **Plymouth** quadrangle, Vermont: USGS Open-File Report 94-654, 2 plates, scale 1:24,000.

**VG95-203A** Ratcliffe, N.M., 1995, Digital bedrock geologic map of the **Cavendish** quadrangle, Vermont: USGS Open-File Report 95-203, 2 plates, scale 1:24000.

**VG95-483** Lyttle, Peter T., Digital bedrock geologic map of the **Arlington** quadrangle and a Vermont portion of the **Shushan** quadrangle, Vermont: USGS Open-File Report 95-483, 2 plates, scale 1:24000.

**VG95-576A** Ratcliffe, N.M., 1995, Digital bedrock geologic map of the **Chester** quadrangle, Vermont: USGS Open-File Report 95-576, 2 plates, scale 1:24000.

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**VG97-854A** Ratcliffe, N.M., 1997, Digital and preliminary bedrock geologic map of the **Chittenden** quadrangle, Vermont: USGS Open-File Report 97-854A, scale 1:24000.

**VG98-121A** Ratcliffe, N.M., 1998, Digital and preliminary bedrock geologic map of the **Rutland** quadrangle, Vermont: USGS Open-File Report 98-121-A, scale 1:24000.

**VG98-123A** Walsh, G.J., 1998, Digital bedrock geologic map of the Vermont part of the **Hartland** quadrangle, Windsor County, Vermont: USGS Open-File Report 98-123-A, one color map and text, scale 1:24000.

**VG98-226A** Walsh, G.J., and Ratcliffe, N.M., 1998, Digital and preliminary bedrock geologic map of the **Pico Peak** quadrangle, Vermont: USGS Open-File Report 98-226-A, scale 1:24000.

**VG98-330A** Ratcliffe, N.M., and Walsh, G.J., 1998, Digital and preliminary bedrock geologic map of the **Mount Carmel** 7.5 minute quadrangle, Vermont: USGS Open-File Report 98-330A, scale 1:24000.

**VG98-335A** Armstrong, T.R., and Ratcliffe, N.M., 1998, Digital and preliminary bedrock geologic map of the **Townshend** 7.5 x 15 minute quadrangle, Vermont: USGS Open-File Report 98-335A, scale 1:24000.

**VG99-337-A** Burton, W.C. and Ratcliffe, N.M., 2000, Digital and preliminary bedrock geologic map of the **Wallingford** quadrangle, Vermont: USGS Open-File Report 99-337-A, scale 1:24000.

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Hatch, N.L., Jr., 1989, Reconnaissance bedrock geologic map of the **South Royalton** quadrangle, Vermont: U.S. Geological Survey Open-File Report 89-288, scale 1:24,000.

Hatch, N.L., Jr., 1990, Reconnaissance bedrock geologic map of the rocks northwest of the Monroe fault, **Concord** quadrangle, Vermont: U.S. Geological Survey Open-File Report 90-283, scale 1:24,000.

Hatch, N.L., Jr., 1991, Reconnaissance bedrock geologic map of the **Randolph Center** quadrangle, Vermont: U.S. Geological Survey Open-File Report 91-275, scale 1:24,000.

Ratcliffe, N.M., 1992, Preliminary bedrock geologic map of the **Mount Holly** quadrangle, and western part of the **Ludlow** quadrangle, Vermont: U.S. Geological Survey Open-File Report 92-282, scale 1:24,000.

Ratcliffe, N.M., and Burton, W.C., 1989, Preliminary bedrock geologic map of the **Stratton Mountain** quadrangle, Vermont: U.S. Geological Survey Open-File Report 89-200, scale 1:24,000.

Ratcliffe, N.M., and Burton, W.C., 1997, Bedrock geologic map of the **Weston Quadrangle**, Windsor, Windham, Bennington, and Rutland counties, Vermont: U.S. Geological Survey Open-File Report 97-722, scale 1:24,000.

Ratcliffe, N.M., 1997, Preliminary bedrock geologic map of the **Chittenden** quadrangle, Rutland County, Vermont: U.S. Geological Survey Open-File Report 97-703, scale 1:24,000.

Walsh, G.J., and Ratcliffe, N.M., 1994, Preliminary bedrock geologic map of the **Plymouth** quadrangle and eastern portion of the **Killington Peak** quadrangle, Windsor and Rutland counties, Vermont: U.S. Geological Survey Open-File Report 94-225, scale 1:24,000.

Walsh, G.J., Armstrong, T.R., and Ratcliffe, N.M., 1996, Preliminary bedrock geologic map of the Vermont part of the 7.5 x 15 minute **Mount Ascutney and Springfield** quadrangles, Windsor County, Vermont: U.S. Geological Survey Open-File Report 96-719, scale 1:24,000.

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Ratliffe, N.M., Potter, D.B., and Stanley, R.S., 1993, Bedrock geologic map of the **Williamstown and North Adams** quadrangles, Massachusetts and Vermont, and part of the Cheshire quadrangle, Massachusetts: U.S. Geological Survey Miscellaneous Investigations Series Map I-2369, scale 1:24,000.

Ratliffe, N.M., 1997, Bedrock geologic map of the **Jamaica** and part of the **Townsend** quadrangles, Windham and Bennington counties, Vermont: U.S. Geological Survey Miscellaneous Investigations Series Map I- 2453, scale 1:24,000.

Ratliffe, N.M., and Armstrong, T.R., 1999, Bedrock geologic map of the **West Dover and Jacksonville** quadrangles, Windham County, Vermont: U.S. Geological Survey Miscellaneous Investigations Series Map I- 2552, scale 1:24,000.

Ratliffe, N.M., 2000, Bedrock geologic map of the **Cavendish** quadrangle, Windsor County, Vermont: U.S. Geological Survey Geologic Quadrangle Series Map GQ-1773, scale 1:24,000.

Ratliffe, N.M., 2000, Bedrock geologic map of the **Chester** quadrangle, Windsor County, Vermont: U.S. Geological Survey Geologic Investigations Series Map I-2598, scale 1:24,000.

Ratliffe, N.M. and Armstrong, T.R., 2001, Bedrock geologic map of the **Saxtons River 7.5' x 15'** quadrangle, Windham and Windsor Counties, Vermont, U.S.G.S. Geologic Investigations Series Map I-2636, scale 1:24,000.

Walsh, G.J., and Falta, C.K., 2001, Bedrock geologic map of the **Rochester** quadrangle, Rutland, Windsor, and Addison Counties, Vermont: U.S. Geological Survey Geologic Investigations Series Map I-2626, scale 1:24,000.

Walsh, G.J., Kim, Jonathan, Gale, M.H., and King, S.M., 2010, Bedrock geologic map of the **Montpelier and Barre West** quadrangles, Washington and Orange Counties, Vermont: U.S. Geological Survey Scientific Investigations Map 3111, 1 sheet, scale 1:24,000, 36-p. text, also available at <http://pubs.usgs.gov/sim/3111> .

Walsh, G.J. and Satkoski, A.M., 2005, Surface gamma-ray survey of the **Barre West** quadrangle, Washington and Orange Counties, Vermont: USGS Scientific Investigations Report 2005-5276, 19 p., only available on-line at <http://pubs.usgs.gov/sir/2005/5276/>