

DESCRIPTION OF MAP UNITS

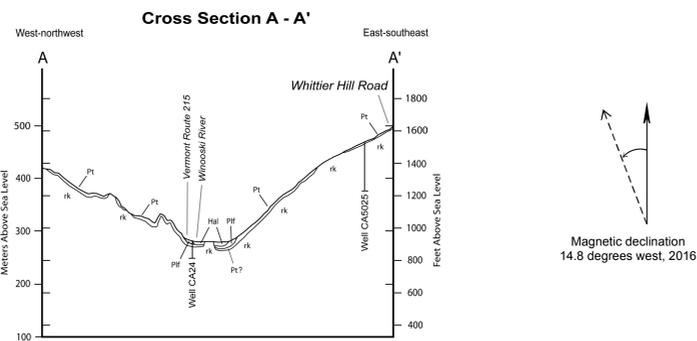
Holocene Deposits

- ar** Artificial Fill. Artificially-emplaced earth along road beds, embankments and in low-lying areas.
- gf** Graded or Filled. Area of extensive artificial excavation or filling.
- Hal** Alluvium. Silt, sand, and gravel deposited by modern streams. Deposits include stream channel and bar deposits and finer-grained floodplain deposits. Welland deposits are common within these areas and are not distinguished. Thickness in the tributaries is typically less than 3 meters, although the depth may be much greater in the valleys of the larger streams.
- Hw** Wetland Deposits. Accumulations of clastic sediment and/or organic matter. Commonly overlying other sediments such as alluvium, lacustrine deposits, or till. Only a few of the larger deposits are shown.
- Hpm** Wetland Deposits, Peat or Muck. Thick accumulation of organic matter with minor clastic sediment. Commonly overlying other sediments such as alluvium, lacustrine deposits, or till. Thickness of organic horizon ranges from 0.3 meter to greater than one meter.
- Hst** Stream Terrace Deposits. Silt, sand, pebble, cobble, and boulder gravel deposited on terraces above the modern floodplains of streams. They represent former floodplains that have been dissected by younger streams.
- Hta** Talus. Fans or aprons of fallen rock at the base of cliffs. May contain colluvial (slope-wash) deposits as well. Of variable thickness.
- Hco** Colluvium. Fans or aprons of sediment at the base of steep slope segments. Slope-wash deposits of variable thickness.

Pleistocene Deposits

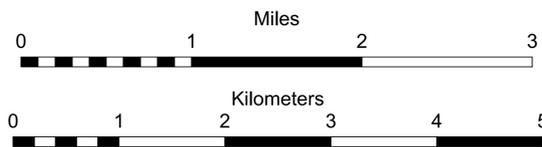
- Plu** Lake Deposits, undifferentiated. Coarse- to fine-grained lake deposits. Largely deposited in arms of glacial Lake Winooski, except in the northern part of the study area to the east of Hardwick village, where the deposits may grade to a higher-level glacial lake.
- Pic** Lake Deposits, Coarse-grained. Well-sorted sand, pebbly sand and/or sandy gravel deposited in shoreline, shallow waters, or lake bottom environments of glacial Lake Winooski or in higher-level glacial lakes of limited areal extent. Parts of the coarse-grained deposits between Lower Cabot and Cabot in the Winooski River valley and in the lower Jug Brook valley may be delta or shoreline deposits, but more detailed mapping would be needed to distinguish these.
- Pif** Lake Deposits, Fine-grained. Clay, silt, and very fine to fine sand deposited in deeper waters. Commonly varved. Deposited in lake bottom environments of glacial Lake Winooski or in higher-level glacial lakes of limited areal extent.
- Pic** Ice-contact Deposits. Unsorted to poorly-sorted sand, gravel, and silt deposited in contact with glacial ice. Kettle holes and a small esker are visible on the ice-contact deposits north of Nichols Pond. A probable esker buried by collapsed lacustrine sands and silts is exposed in the sandpit west of Smith Corner in Walden.
- Pt** Till. Dense to very dense, unsorted to very poorly sorted, fine-sand- to silt-matrix till. Surface boulders are common, with boulders of the local Woodbury Granite common in the western third of the study area. Thickness of the till is highly variable, from less than 3 meters to greater than 30 meters.
- Ptt** Till, Thin. Descriptions as in preceding unit. Thickness highly variable but generally less than 3 meters and bedrock outcrops are very common.
- rk** Bedrock. Area of extensive bedrock exposures. Most outcrops visited during this study are indicated by the point symbols described below.

- ▲ Field Site
- Bedrock Outcrops
- ↑ Glacial Striation
- Water Well
- Borings
- ⊗ Kettle Hole
- ⊕ Granitic Glacial Boulder
- × Sand or Gravel Pit
- ⊗ Bedrock Quarry
- ⊗ Dam Site
- Cross Section Line
- Abandoned Stream Channel
- Projected Glacial Lake Winooski Shoreline
- +++ Esker
- Meltwater Channel
- Quadrangle Boundaries
- Water Bodies



Horizontal Scale = 1:24,000
Vertical Exaggeration = 2.5 X

Scale 1:24,000



Contour Interval 20 feet

**Surficial Geologic Map of the Cabot
7 1/2 Minute Quadrangle, Vermont**
by
George E. Springston
2016



Base map from U.S. Geological Survey.
Coordinate System: Vermont State Plane, meters, NAD 83.
Geographic coordinates shown at topo corners are in NAD 83.
Grid overlay on map is UTM, Zone 18N, NAD83.
Digital cartography by George Springston, May 29, 2016.

Bedrock outcrop locations are from Konig (1961) and this study.

Thanks to Devlin Rutherford for enthusiastic field assistance and to the Town of Cabot for volunteer support throughout the project.

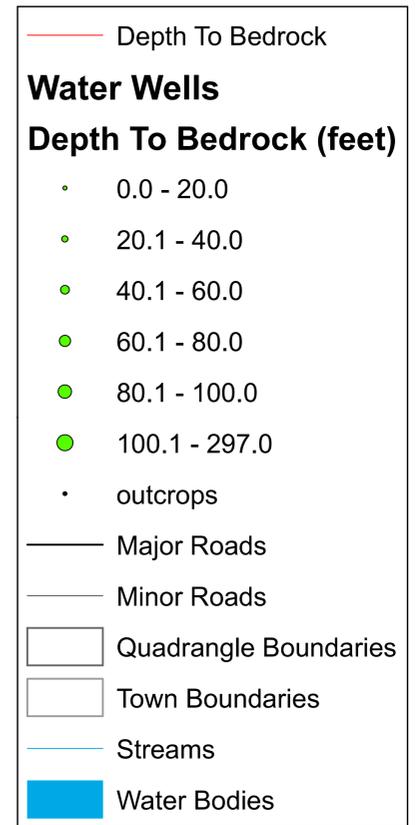
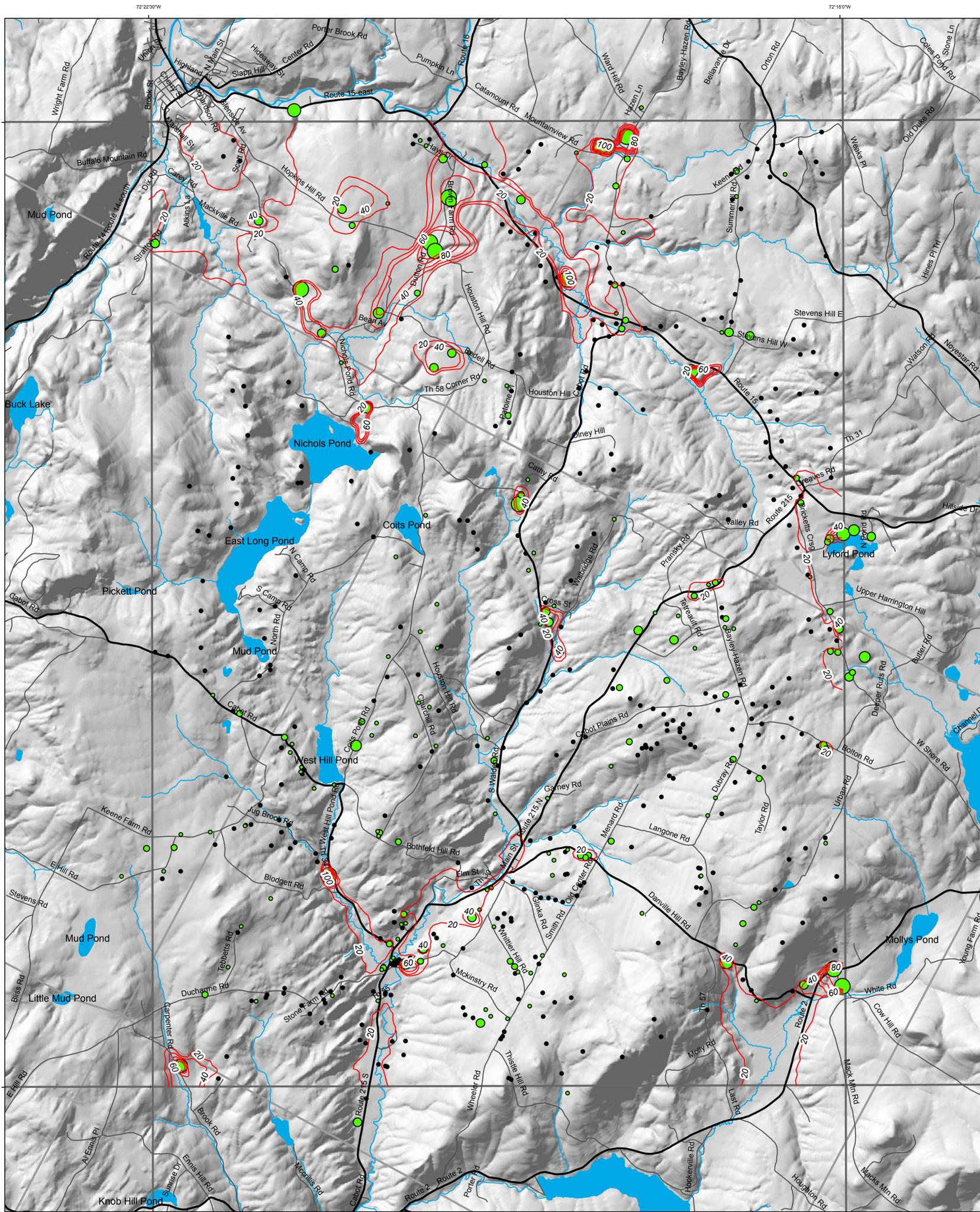
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Reference:
Konig, R.H., 1961, Geology of the Plainfield quadrangle: Vermont Geological Survey Bulletin no. 16, Montpelier, 86 p. plus 2 plates (1:62,500).

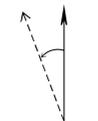
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EXPLANATION

This plate shows depth to bedrock in feet. Depth to bedrock is indicated by the size of the green symbols at each well location. Bedrock outcrops are shown as black dots. The red lines are approximate contours at depths of 20, 40, 60, 80, and 100 feet. Note that most of the areas with more than 20 feet to bedrock are in Hardwick and Walden. The depth is more certain in areas with abundant water well logs and/or bedrock outcrops and less certain in areas where this information is sparse.

The mean depth to bedrock in the wells is 32.1 feet and the median value is 20.5 feet.



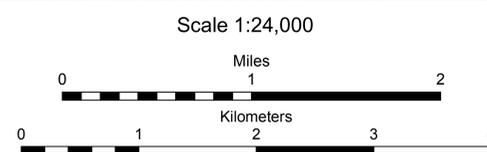
Magnetic declination
14.7 degrees west, 2016

Base map from U.S. Geological Survey.
Coordinate System: Vermont State Plane, meters, NAD 83.
Geographic coordinates shown at topo corners are in NAD 83.

Digital cartography by George Springston, June 30, 2016.
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Dept. of Environmental Conservation, VT ANR.

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**Depth to Bedrock,
Cabot Quadrangle, Vermont**
by
George E. Springston
2016

