



Description of Map Units

- Holocene Deposits**
- af** Artificial Fill. Artificially-emplaced material along road beds, embankments and in developed areas. Material varies from natural sand, gravel, or till to various artificial waste materials. Thickness varies.
 - Ha** Alluvium. Silt, sand, and gravel deposited by modern streams. Includes stream channel, bar, and floodplain deposits. Wetland deposits are common within these areas and are not distinguished. Thickness in tributary valleys is typically less than 3 meters, although the depth may be much greater in the valleys of the larger streams.
 - Hat** Alluvial Terrace Deposits. Silt, sand, and gravel deposited on terraces above the modern floodplains of streams. They are composed of a variety of channel, bar, and floodplain deposits. Generally less than 5 meters thick.
 - Haf** Alluvial Fan Deposits. Boulder, pebble, and cobble gravel and pebbly sand deposited at sites where steep, stream gradients are sharply reduced. Common at the mouths of steep tributaries where they meet the main stream. Generally less than 5 meters thick.
 - Hw** Wetland Deposits. Accumulations of organic matter and/or clastic sediment in low-lying areas. Includes a wide variety of wetland types. Commonly overlying other deposits such as alluvium, lacustrine sediment, or till. Only larger deposits are shown.
- Pleistocene Deposits**
- Pl** Lacustrine Deposits, Undifferentiated. Coarse- to fine-grained sediment deposited in a proglacial lake.
 - Plc** Lacustrine Deposits, Coarse-grained. Well-sorted sand, pebbly sand and/or sandy gravel deposited in shoreline, shallow water, or lake bottom environments of a glacial lake.
 - Plf** Lacustrine Deposits, Fine-grained. Clay, silt, and very fine to fine sand deposited in deeper waters. Commonly laminated. Deposited in distal lake bottom environment of a proglacial lake.
 - Pldh** Lacustrine Deposits, Delta. Well-sorted sand and gravel deposited in glacial Lake Hitchcock at the mouth of a tributary stream. Includes topset and foreset beds. The Peach Brook Delta is located north of Halls Lake on the eastern edge of the quadrangle. A probable delta is located on the west side of Meadow Brook in the south-central part of the quadrangle.
 - Pie** Esker Deposits. Elongate ridge of ice-contact stratified sand and gravel deposited by glacial meltwater streams in tunnels within or beneath the glacial ice. A short esker segment is located in the southwestern corner of the quadrangle, south of the South Branch of the Waits River.
 - Pt** Till. Very dense to loose, unsorted to very poorly sorted material deposited directly from glacial ice. Contains a wide range of grain sizes, from clay or silt up to large boulders. The till matrix texture ranges from fine sand to silt. Surface boulders are very common. Thickness is highly variable, from less than 3 meters to greater than 30 meters. Areas near the tops of hills that are mapped as till may include colluvium and talus deposits and/or have less than one meter to bedrock.
- Quaternary Deposits**
- Qg** Sand and Gravel, Undifferentiated. Encompasses a wide variety of coarse-grained surficial materials in cases where information is inadequate to determine age and environment of deposition. Some of these deposits in this quadrangle may be older alluvial fan deposits or glacial outwash.
- Older Deposits**
- rk** Area of extensive bedrock exposures.

Map Symbols

- Surficial Field Station
- Bedrock Outcrop
- Shallow Bedrock
- ↑ Glacial Striation
- Wells
- × Sand and Gravel Pit
- × Sand and Gravel Inventory Site
- + Cross Section Point
- Summits (feet)
- Abandoned Channel
- Crag and Tail Landform
- Esker
- Meltwater Channel
- Contacts (All Are Approximate)
- Line of Cross Section
- Glacial Lake Hitchcock
- Roads, Major
- Roads, Minor
- Streams
- Water Bodies
- Town Boundaries
- Quadrangle Boundaries
- Index Contours (100 foot)
- Contours (20 foot)



View west across study area from lookout on Wrights Mountain in Bradford with the Green Mountains on the horizon.



Meltwater channel in glacial till south of Wrights Mountain, Bradford.



Quartzose phyllite of the Gile Mountain Formation exposed in the bed of the Waits River, Corinth.



Talus at Devils Den on south flank of Wrights Mountain in Bradford.



Saproillite developed on gray, foliated, quartzite and phyllite exposed on James Downing Road in Topsham.



Pit in pebbly sand deposited in glacial Lake Hitchcock, west side of Rt. 25 in Corinth.

Definitions

Abandoned Channel. A segment of stream channel that is still exposed at the Earth's surface that has been cut off from the remainder of the stream. Includes oxbows and other abandoned channel segments on modern floodplains as well as older features preserved on alluvial terraces.

Crag and Tail Landform. A streamlined hill or ridge, consisting of a knob of resistant bedrock with an elongate body of more erodible bedrock, till, or both, on its lee side.

Meltwater Channel. A channel cut by glacial meltwater flowing under, along, or in front of an ice margin. Lateral ice-marginal channels commonly run across a hillside, beginning and end abruptly, with limited modern-day drainage areas. These channels commonly occur in down-stepping sets on moderate to gentle till slopes and probably formed as the ice-margin retreated progressively down slope.

Coordinate System: Vermont State Plane, FIPS 4400, NAD 83. Geographic coordinates shown at topo corners are in NAD 83. Grid overlay on map is UTM, Zone 18N, NAD83. Base map data from the Vermont Center for Geographic Information (VCGI). Contours and shaded relief layer derived from 0.7 m lidar DEM, downloaded as a 5.0 m DEM from VCGI. Digital cartography by George Springston, Norwich University, Dept. Earth and Environmental Sciences, May, 2021.

Additional bedrock outcrops are derived from the Vermont Geological Survey layer "Bedrock Outcrops" hosted by VCGI.

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Surficial Geologic Map of the East Corinth
7 1/2 Minute Quadrangle, Vermont

by
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