Surficial Geologic Map of the Northern 2/3 of the South Mountain Quadrangle, Vermont

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Legend

Description of Map Units

Hickokine Deposits

Artificial Fill. Artificially placed earth along road beds, embankments, and lowing areas.

Alluvium. Silt, sand, and gravel deposited by modern streams. Deposits include swamps bordered by tree deposits and fine-grained floodplain deposits. Alluvium (silt) deposits are common within these areas and are not distinguishable. Thickness is the Hickokine is typically less than 3 meters, although the depth may be much greater in the valley of the larger streams.

Wetland Deposition. Accumulations of organic matter and/or clay sediment. Commonly occurring in basins or sinks. Thickness of organic horizons (where present) ranges from 0.5 meter to greater than one meter.

Alluvial Fan Deposits. Boulder, pebble, and cobble gravel and pebbly sand deposited at the mouths of valleys. Commonly less than 3 meters thick.

Stream Trench Deposits. Silt, sand, pebbles, cobbles, and boulder gravel deposited on terraces above the modern floodplains of streams. Commonly overlapping lacustrine sediments. These represent former floodplains that have been dissected by younger streams. Generally less than 3 meters thick.

Table. Tones on any of the rock units of the base of slopes, along segments. They contain considerable slope-wash deposits as well. Of variable thickness.

Paleosol Deposits

Delia Deposits. Coveville Stage of glacial Lake Vermont. Coarse gravels and gravelly sand deposits, generally well-sorted, deposited at the mouth of the ancestral New Haven River in the northwestern part of the study area and east of Cobble Hill in the southeastern part.

Delia Deposits, glacial Lake Birid. Sand and gravel deposits of a meteric scale into glacial Lake Birid north of West Lincoln in the northeastern part of the Quebec, Lake Birid, and Kimball valleys. These deposits often underlie the delam in the back of the Highrock Mountain and South Mountain at Bristol Village.


Lake Deposits, Coarse-granular. Well-sorted sand and gravel deposited in shallow water or as proglacial floodplain sediments from threethirds of Bristol Village. Deposited in Coveville or Upper Fort Ann Stages of glacial Lake Vermont.

Lake Deposits, Unconformable. Coarse to fine-granular lake deposits.

Lake Trench Deposits. Primarily in interfluve valleys; generally sandy beaches, sand, gravel, and alluvial deposits. Upper surface commonly contains kettle holes. Thickness generally from 3 to 20 meters.

Ice-contact Deposits. Unconsolidated to partly worked sand, gravel, and alluvial deposits in contact with glacial ice. Includes possible glacial tundra and water deposits in the central part of the Lynch Valley near Gladys and in the northwestern part of the study area near West Lincoln.

Wetted valley Trench. Similar to Prop Trench but with a well-defined valley width. Deposits found on dunes within the Coveville Valley of glacial Lake Vermont.

This Trench. Dune to very dense, unsorted to very poorly sorted, sand to alluvial deposits. Sand to silt deposits are common. Thickness is highly variable, but generally from 5 to 30 meters.

This Trench. Dune to very dense, unsorted to very poorly sorted, sand to alluvial deposits. Surface textures are common. Thickness is highly variable, but generally from 5 to 30 meters.

Trench. Deposits as in previous unit. Thickness highly variable, but generally less than 3 meters and bedrock outcrops are very common. The bedrock outcrops are particularly abundant on the higher ridges of South Mountain in the center of the study area.

Map Symbols

- Field Sites
- Bedrock Outcrops
  - Crag and Tail Landforms
  - Glacial Stratigraphy
    - Line of Cross-section
    - New Haven River 2012
    - Abandoned Stream Channels
    - Meltwater Channels
    - Pre-Coveville Shorelines
    - Terrace Edges
    - Till Bench Edges
    - Kettle Holes
    - Lower Fort Ann Shoreline of glacial Lake Vermont
    - Upper Fort Ann Shoreline of glacial Lake Vermont
    - Coveville Shoreline of glacial Lake Vermont

Scale 1:24,000

Contour Interval 20 feet