70-87

Collinsville Quadrangle, Connecticut
by Roger B Colton

EXPLANATION

Note: A layer of windblown silt and sand, generally mixed with underlying glacial debris by frost action, solifluction and tree throw, is present but not shown. As much as 5 feet thick

Holocene

Qta

Talus or sliderock

Accumulation of basalt fragments at the base of steep cliff along east edge of quadrangle. Blocks of rock as much as 15 feet in diameter but most are less than one foot. Thickness varies greatly but may be as much as 50 feet

Qal

Alluvium

Gravel, sand, and silt deposited by streams on flood plains. Generally 10 to 20 feet thick but may be as much as 50 feet

Qb

Beach deposits

Sand and gravel along the shore of Nepaug Reservoir; as much as 5 feet thick

Qf

Fan deposits

Poorly sorted sand, gravel, and silt deposited in part by streams and in part by solifluction processes. Generally 25 feet thick but locally may be as much as 50 feet thick. May include deposits of late glacial age

Qs

Swamp deposits

Dark-brown to black peat and muck mixed or interbedded with silt, sand, and clay. Generally 5 to 10 feet thick but locally may be as much as 15 feet thick

Qst

Terrace deposits

Stream deposits of sand and gravel above modern flood plain. Generally 10 to 15 feet thick but may be as much as 25 feet thick locally. May include deposits of late glacial age

Qo_3
Qo_2
Qkt

Roaring Brook deposits

Light reddish brown silt, sand, and gravel deposited by melt-water streams around and beyond buried glacier ice. Generally well bedded and well sorted. As much as 50 feet thick but averages only 25 feet thick. Sequence of deposition shown by subscripts; Qkt oldest to 3 youngest

Qoc

Canton outwash

Light reddish brown sand and gravel; generally well bedded and sorted. As much as 40 feet thick but averages only 15 feet thick

QUATERNARY

Qktc

Cherry Creek kame terrace deposits

Reddish brown gravel and sand, poorly stratified and sorted, kettled and collapsed. Also includes an ice channel filling (eskers). Generally 30 feet thick but locally may be as much as 50 feet thick

Qcd

Ice-contact stratified drift undivided

Yellowish-brown stratified silt, sand, gravel, and boulders deposited by glacial melt water in close proximity to glacier ice. Deposits include kames (k), kame terraces (kt), and kettled glacio-fluvial deposits. May be as much as 60 feet thick but averages 30 feet thick

Qkt_4
Qkt_3
Qkt_2
Qkt_1

Budington kame terrace deposits

Yellowish-brown stratified sand and coarse gravel deposited by a glacial melt water; kettled and collapsed. Sequence of deposition shown by subscripts; 1 oldest to 4 youngest. Surfaces of Qkt_1 generally below altitude of 930, Qkt_2 generally below altitude 880, Qkt_3 generally below altitude 790, and Qkt_4 generally below altitude 630. As much as 150 feet thick.

Q1n/Qph

Glacial Lake Nepaug deposits

(Q1n) gray silt and sand deposited in glacial Lake Nepaug; thin bedded, contains thin lenses of fine to coarse gravel. Unit as much as 50 feet thick but averages only 20 feet thick.

(Qph) Pine Hill moraine deposits. Light-yellowish-gray collapsed sand and minor gravel deposited in Lake Nepaug moraine. May be as much as 150 feet thick but average thickness is only 75 feet

Pleistocene

Qtr

Younger till

Reddish brown loose to compact unsorted to poorly sorted, nonstratified mixture of 17% clay, 21% silt, 42% sand, 18% pebbles, and 2% cobbles and boulders. Generally only a few feet thick but locally may be as much as 20 feet thick. Composition very variable

Qt

Older till

Loose, sandy, unsorted to poorly sorted, nonstratified mixture of 10% clay, 25% silt, 55% sand, 8% pebbles, 2% cobbles and boulders. Generally gray to light gray. Thickness varies but generally 30 feet but as much as 70 feet thick under crests of some drumlins. Elsewhere forms discontinuous veneer as much as 20 feet thick on irregular bedrock surface. Contains many small-to-large irregular lenses of faulted and contorted stratified sand and gravel. Composition very variable.

br

Bedrock outcrops

Solid color represents individual outcrop (size exaggerated). Ruled pattern includes areas of abundant outcrops and patches of thin surficial deposits. Some outcrops taken from manuscript maps of Rolf S. Stanley.

af

Artificial fill

Sand, gravel, broken rock, and till. Generally less than 20 feet thick but some are as much as 60 feet thick. Trash fills not mapped.

Large melt-water channel

Abandoned channel of glacial stream or a spillway from a temporary lake. Generally floored with a lag concentrate of boulders but in places floored with a thin deposit of coarse gravel. Arrow indicates inferred direction of flow

Ice-channel deposits

Gravel, generally medium to coarse, and sand seposited by glacial melt waters in ice walled channels on or beneath an ice lobe, tongue, or block; includes forms known as eskers (e) and crevasse fillings (cf). Points of chevrons indicate inferred direction of flow of glacial stream

Small melt-water channel

Abandoned channel or narrow valley open at both ends which was cut by melt water flowing in an ice marginal channel, or spillway, or at the base of the ice. Generally floored with a bouldery lag concentrate but in places floored with a thin deposit of coarse gravel. Arrow indicates inferred direction of melt-water flow.

Scarp within a map unit

Sand and gravel pit

Abandoned pit

Drumlin or drumlinoid hill

Hill of till, smoothed and streamlined by ice, with or without bedrock core. Line parallel to long axis and inferred direction of flow of ice

Glacial striations and grooves

Arrow shows inferred direction of ice movement; point of observation at tip of arrow

Abandoned rock quarry

Multiple pit or large pit area

Texture of deposits

Letter symbols indicate composition and texture of deposits; read hyphen as "to".

s	sand	g	gravel of mixed sizes
p	pebbles	pg	pebble gravel
c	cobbles	cg	cobble gravel
b	boulders	t	till

Contact

Dashed where approximately located

Till fabric analysis

Dashed arrow indicates approximate direction of movement of ice that deposited older till. Locality at tip of arrow