Colchester Rodgers Bedrock Compilation Sheet (paper)

Map

NOTICE !

Bedrock quadrangle 1:24,000 scale compilation sheets for the Bedrock Geological Map of Connecticut, John Rodgers, 1985, Connecticut Geological and Natural History Survey, Department of Environmental Protection, Hartford, Connecticut, in Cooperation with the U.S. Geological Survey, 1:125,000 scale, 2 sheets. [minimum 116 paper quad compilations with mylar overlays constituting the master file set for geologic lines and units compiled to the State map, some quads have multiple sheets depicting iterations of mapping]. Compilations drafted by Nancy Davis, Craig Dietsch, and Nat Gibbons under the direction of John Rodgers.

Geologic unit designation table translates earlier map unit nomenclature to the units ultimately used in the State publication.

This map set contains unpublished maps, cross- sections, and related information archived by the State Geological and Natural History Survey of Connecticut as part of the Survey Library Collection.

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PREPARED IN COOPERATION WITH
THE U. S. GEOLOGICAL SURVEY

STATE OF CONNECTICUT
GEOLOGICAL AND NATURAL HISTORY SURVEY
JOE WEBB PEOPLES, DIRECTOR

QUADRANGLE REPORT NO. 27
PLATE 2

(MARLBOROUGH) (COLUMBIA) (WILLIMANTIC) (MOODUS) (FITCHVILLE) (DEEP RIVER) (HAMBURG) (MONTVILLE)

72°22'30" 20' 17'30" 72°15' 41°37'30" 35' 32'30" 41°20'

730 000 FEET 280 000 FEET 250 000 FEET 710 000 FEET

BEDROCK GEOLOGIC MAP OF THE COLCHESTER QUADRANGLE, CONNECTICUT

By Lawrence W. Lundgren, 1965-1966, and George L. Snyder, 1957-1960

SCALE 1:24000

Base map by U.S. Geological Survey

Control by USGS, & USC&GS, and Connecticut Geodetic Survey

Culture and drainage in part compiled from aerial photographs
Topography by plane-table surveys 1942-1943. Revised 1953

Polyconic projection. 1927 North American datum
10,000-foot grid based on Connecticut coordinate system

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

APPROXIMATE MEAN DECLINATION, 1953
13½° MAGNETIC NORTH TRUE NORTH

CONNECTICUT
QUADRANGLE LOCATION

EXPLANATION

DEVONIAN OR OLDER

Pegmatite
Coarse-grained, pink or white granitic rocks generally consisting of quartz, oligoclase or ablite, and microcline, and muscovite, biotite or both. Beryl, garnet and tourmaline are present in pegmatite in Hebron Formation.

Dmg

Muscovite-garnet gneiss
Medium-grained, white oligoclase-microcline-quartz-muscovite-biotite-garnet quartz monzonite gneiss.

Dlg_3 Dlg_c Dlg_4

Lebanon Gabbro of Rodgers and others (1959)
Dlg_3: *Spotted white to black hornblende-biotite gabbro and diorite composed mainly of calcic plagioclase, hornblende, biotite, quartz, and magnetite-ilmenite. Hornblende more abundant than biotite. Color index greater than 37.*

Dlg_4: *Streaked, white to black, biotite diorite composed mainly of plagioclase, biotite, hornblende, and quartz. Biotite more abundant than hornblende, which is absent locally. Color index 30.*

Dlg_c: *Cataclastic facies of metagabbro within Honey Hill blastomylonite zone. Rock consists of andesine, hornblende, biotite and quartz. All minerals are partially crushed.*

Dh Dhs

Hebron Formation
Dh: *Interbedded brownish gray quartz-biotite-plagioclase schist and greenish gray calc-silicate gneiss.*

Dhs: *Muscovite-biotite schist.*

Dc

Canterbury Gneiss
Gray, biotite-bearing quartz-feldspar gneiss locally containing conspicuous augen of Carlsbad-twinned microcline.

ORDIVICIAN OR OLDER

Ob Oba

Brimfield Schist
Ob: *Gray or rust-stained garnetiferous biotite-muscovite schist with subordinate sillimanitic schist, garnetiferous quartz-biotite schist, garnetiferous calc-silicate granofels, and amphibolite.*

Oba: *Hornblende-plagioclase amphibolite.*

Ot

Tatnic Hill Formation
Schist similar to Brimfield Schist (Ob) and believed to be partially stratigraphically equivalent. Present, but not exposed in C IX; presence inferred from distribution in adjoining quadrangles.

Ivoryton Group of Lundgren (1966b)

Omia Omig Omia

Middletown Gneiss
Omig: *Rust-stained quartz-feldspar gneiss with interbedded amphibolite layers.*

Omia: *Amphibolite interbedded with light-colored layers of quartz-feldspar gneiss in which anthophyllite, cummingtonite, or both of these amphiboles are present.*

Omga

Monson Gneiss
Pink, foliated alaskite granite (quartz, microcline, plagioclase, magnetite).

Contact
Dashed where approximately located; short dashed where gradational or inferred; dotted where concealed.

Fault
Dashed where approximately located or inferred. Saw teeth on upper plate. Arrows show probable thrust.

Zone of cataclastic rock
Blastomylonite, locally crushed and partly recrystallized. u: outcrop where aphanitic ultramylonite may be observed.

PLANAR FEATURES

50 Inclined — Vertical

Strike and dip of foliation. Stronger alternation of schist or gneiss generally parallel with compositional layering, assumed to be bedding, in the Hebron Formation and Middletown Gneiss.

70 Inclined — Vertical

Strike and dip of conspicuous joints.

LINEAR FEATURES

20 A

Bearing and plunge of lineation. Tail of arrow at point of observation. Letter symbols indicate nature of lineation. A, anthophyllite; Bo, boudin neck line; H, hornblende; S, sillimanite.

MINOR FOLDS

30 Strike and dip of inclined axial plane.

15 FA Bearing and plunge of fold axis.

FA: axis of symmetrical fold. ~ symbol indicates map sense of small asymmetric fold viewed down the plunge.

25 Isoclinal folds

Quarry