Torrington Rodgers Bedrock Compilation Sheet 2 (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This map set contains unpublished maps, cross- sections, and related information archived by the State Geological and Natural History Survey of Connecticut as part of the Survey Library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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STATE OF CONNECTICUT
GEOLOGICAL AND NATURAL HISTORY SURVEY
JOE WILLIAM PONS, DIRECTOR

QUADRANGLE REPORT NO. 25
PLATE 1

GEOLOGIC MAP OF THE TORRINGTON QUADRANGLE, CONNECTICUT

Bedrock Geology by Charles W. Martin 1965-67

Base map by U.S. Geological Survey

Control by USGS, USC&GS, and Columbia University

Topography from aerial photographs by multiplex methods
Aerial photographs taken 1944. Field check 1948
Revised 1956

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

SCALE 1:24000

1 0 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, 1956

QUADRANGLE LOCATION

Williams & Heintz Map Corporation, Washington, D.C. 20027

EXPLANATION

Granite and Pegmatite

ng Nonewaug Granite. *Fine-grained to pegmatitic, massive to layered rock composed of mica, microcline, quartz, and plagioclase. Coarse graphic plagioclase crystals are locally abundant.*

tg Tyler Lake Granite. *Medium-grained to pegmatitic, massive to gneissic, biotite-muscovite-microcline-quartz-plagioclase granite, with accessory garnet, apatite, zircon, and chlorite. Color is gray, pink, or white. Pegmatite is abundant as lenses or irregular patches.*

g Undifferentiated granite.

p Pegmatite.

Amphibolite

Fine- to coarse-grained, dark green to black amphiboliles composed essentially of hornblende, plagioclase, and quartz, with accessory garnet, biotite, apatite, zircon, carbonate, magnetite, epidote, and sphene. A few contain abundant coarse garnets: Amphibolites range from unfoliated to well-foliated and slabby.

Altered Ultrabasic Rocks

Massive, gray weathering rocks consisting mainly of serpentine, talc, and tremolite, with subordinate olivine remnants, and accessory carbonate, pyrite, and magnetite.

MIDDLE PALEOZOIC (?)

Hartland Formation Unit III

h_{III}

Thinly interlayered, slabby, fine- to medium-grained, muscovite-biotite-plagioclase-quartz granulite and muscovite-plagioclase-quartz-biotite schist. Characterized by abundant graphite, especially in granulite, and by porphyroblastic biotite and kyanite in the schist. Granulite is dark gray, schist is silvery.

Hartland Formation Unit II

$h_{II}p$ h_{II}

$h_{II}p$ *Medium-grained, biotite-muscovite-plagioclase-quartz schist with abundant, coarse porphyroblasts of plagioclase, garnet, staurolite, and kyanite. Accessory minerals are chlorite, tourmaline, zircon, apatite, sphene, rutile, and magnetite. Dominates upper part of Unit II and contains several amphibolite lenses.*

h_{II} *Medium-grained, muscovite-biotite-plagioclase-quartz schist. Lacks coarse porphyroblasts, otherwise similar to $h_{II}p$. Characteristic of lower part of Unit II.*

The Straits Schist

h_{IS}

Medium- to coarse-grained plagioclase-biotite-muscovite-quartz schist with staurolite, garnet, and kyanite porphyroblasts. Accessory minerals are zircon, sphene, apatite, and opaques.

Hartland Formation Unit I

h_I h_Ik

h_I *Fine-grained, gray, muscovite-biotite-plagioclase-quartz granulite or granulitic gneiss with subordinate layers of mica-plagioclase-quartz schist. .Contains amphibolite in thin layers to pods and minor calc-silicate.*

h_Ik *Fine- to medium-grained, kyanite-mica-plagioclase-quartz granulitic gneiss, with subordinate garnet, staurolite, and magnetite. Accessory minerals are chlorite, tourmaline, zircon, apatite, sphene, and sillimanite. Typically less well foliated than h_I.*

LOWER PALEOZOIC (?)

Waramaug Formation

w

Rusty-weathering muscovite-biotite-plagioclase-quartz gneiss and sillimanite-kyanite-muscovite-plagioclase-quartz-biotite gneiss, the two types intermixed and intergradational. Accessory minerals are chlorite, staurolite, zircon, apatite, tourmaline, sphene, and magnetite. The rock is typically poorly foliated and has nubby weathered surfaces where kyanite or sillimanite are present. Contains amphibolite lenses.

PRECAMBRIAN (?)

The Gneiss Complex of the Berkshire Highlands

bgcl bgcs bgcb

bgcl *Gray, fine- to medium-grained, layered microcline-biotite-quartz-plagioclase granite gneiss. Layering depends on differing proportions and arrangements of felsic and mafic minerals. Contains subordinate interlayered amphibolite, mafic gneiss, biotite gneiss, and calc-silicate rocks. Granite and pegmatite are abundant, and locally the rock is migmatitic.*

bgcs *Pink and gray, fine- to medium-grained, massive to biotite streaked, mico-microcline-quartz-plagioclase granitic gneiss. Contains minor amphibolite, mafic gneiss, and calc-silicate rocks, but lacks biotitic gneiss. Well-banded granitic gneiss is rare.*

bgcb *Rusty weathering fine- to medium-grained, sillimanite-kyanite-quartz-plagioclase-biotite gneiss. Kyanite and sillimanite cause nubby weathered surfaces. Accessory minerals are zircon, rutile, apatite, and magnetite. (Special symbol indicates small zones of bgcb type lithology but no intended correlation with bgcb unit.)*

Contact, dashed where inferred or approximately located.

Probable fault?

Outcrop areas.

70 Strike and dip of foliation.

65 Generalized strike and dip of crumpled or variable foliation. Dip in direction of numeral.

Strike of vertical foliation.

Horizontal foliation.

10 Direction and plunge of mesoscopic fold axes.

Horizontal fold axes.

Anticline, showing direction of plunge.

Overturned syncline.

Interpretation Above Surface and Below Sea Level is Schematic