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This map set contains unpublished maps, cross- sections, and related information archived by the State Geological and Natural History Survey of Connecticut as part of the Survey Library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

These materials have not been reviewed for accuracy, consistency, or completeness. For many geographic areas, more current information exists, either in published or unpublished form.

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

QUADRANGLE REPORT NO. 16
PLATE 1

GEOLOGIC MAP OF THE COLLINSVILLE QUADRANGLE, CONNECTICUT

Bedrock Geology by Rolfe S. Stanley in 1955, 1959-1961

EXPLANATION

SURFICIAL DEPOSITS

PLEISTOCENE

Glacial cover
(only shown where cover prevents mapping of stratigraphy)

SEDIMENTARY ROCKS

TRIASSIC

TrN — New Haven Arkose
Light to dark red arkosic conglomerate, arkose, and arkosic siltstone.

Trd — Dolerite

PROFOUND UNCONFORMITY

METAMORPHIC ROCKS

Hartland Group

SLrs / SLks — Slashers Ledges Formation

rusty schist member
Rusty-weathering, medium-grained, staurolite-kyanite-garnet-mica-plagioclase-quartz schist.

kyanite schist member
Nonrusty-weathering, medium-grained, magnetite-garnet-kyanite-biotite-plagioclase-quartz-muscovite schist with large porphyroblasts of kyanite and plagioclase. Beds of biotite-quartz-plagioclase gneiss and staurolite-garnet-quartz-mica-plagioclase schist occur on either side of the bed of amphibolite.

SKbh / SKrm — Satans Kingdom Formation

Breezy Hill Member
Nonrusty-weathering, medium-grained, staurolite-garnet-plagioclase-mica-quartz schist containing small porphyroblasts of plagioclase.

Rusty-weathering, medium-grained, kyanite-garnet-plagioclase-mica-quartz schist.

Ratlum Mountain Member
A mixed assemblage of commonly nonrusty-weathering, medium-grained rocks containing garnet-biotite-muscovite-plagioclase-quartz schist, garnet-biotite-plagioclase-quartz gneiss, amphibole-biotite-plagioclase gneiss, calc-silicate gneiss, and a zone of garnet amphibolite which is commonly associated with light-gray schist with large porphyroblasts of plagioclase. Anthophyllite-plagioclase gneiss is locally present near the amphibolite. Garnet-staurolite-kyanite and garnet-kyanite are common in the schist.

RHu — Rattlesnake Hill Formation

upper member
Rusty-weathering, fine-to medium-grained mica-quartz schist interbedded with thinly to thickly bedded mica quartzite and mica-plagioclase-quartz gneiss. Graphite present in some schist. Garnet and kyanite sparce. Quartz-garnet granulite present in some localities. Rocks on Jones and Yellow Mountains are considered facies equivalents with those rocks of the upper member in the center of the quadrangle.

lower member
An assemblage of nonrusty-weathering, medium-grained rocks consisting of kyanite-garnet-biotite-plagioclase-muscovite-quartz schist, amphibolite, and calc-silicate gneiss and granulite.

RHu? — Rocks on Jones and Yellow Mountains

PRE-TRIASSIC

S — The Straits Schist
Rusty-weathering, medium- to coarse-grained, graphite-kyanite-garnet-plagioclase-biotite-muscovite-quartz schist. Lenses of amphibolite and thin beds of graphite-mica-quartz gneiss are common.

lower group

Cs / Cb — Collinsville Formation

Sweetheart Mountain Member
Nonrusty-weathering, medium- to coarse-grained, kyanite-garnet-muscovite-biotite-plagioclase-quartz schist. Lenses of amphibolite occur throughout the member.

Bristol Member
A heterogeneous unit composed of medium-grained, garnet-biotite-quartz-plagioclase gneiss, garnet-biotite-muscovite-plagioclase-quartz gneiss and schist, and amphibolite, with subordinate amphibole-biotite-quartz-plagioclase gneiss and a distinctive zone of quartz-garnet granulite and gneiss. All rocks are nonrusty weathering and range in color from white through shades of gray and greenish gray.

Twv / Tsm / Twc — Taine Mountain Formation

Whigville Member
Nonrusty-weathering, medium-grained, garnet-plagioclase-mica-quartz schist that locally contains kyanite. The schist is commonly layered.

Scranton Mountain Member
Rusty-weathering, medium-grained, kyanite-garnet-plagioclase-quartz-mica schist with subordinate mica-plagioclase-quartz gneiss and a few beds of calc-silicate gneiss.

Wildcat Member
Nonrusty-weathering, fine- to medium-grained, biotite-plagioclase-quartz gneiss with subordinate biotite-plagioclase-muscovite-quartz schist, kyanite-plagioclase-biotite-quartz schist and a few lenses of amphibolite.

ROCK TYPE

- Amphibolite
- Schistose amphibolite
- Talc-chlorite schist, steatite, pyroxene-hornblende gneiss (Prospect pits common at each locality)
- Rock containing anthophyllite and garnet
- oooo Plagioclase porphyroblasts 2 cm to 4 cm in size
- cccc Calc-silicate gneiss or granulite
- xxxx Quartzite
- Quartz-garnet granulite
- Granitic rocks containing muscovite, quartz and white feldspar. Biotite less common.
- P — Granitic rocks with pink feldspar
- PP — Granitic rocks with large crystals of feldspar
- Granitic rocks with porphyroblasts of microcline
- Contact, solid where definite, dashed where approximate, dotted where inferred, and queried where questionable.

STRUCTURAL

PLANAR
(Strike and dip shown by each symbol; number indicates the value of dip in degrees)

- Foliation: inclined, vertical, horizontal, crumpled by crenulate folds
- Bedding foliation: inclined, vertical, horizontal (includes bedding in sedimentary rock)
- Axial-surface foliation: inclined
- Foliation measured in temporary excavations
- Axial surface of minor fold: inclined, vertical
- Joint: inclined, vertical (shown only in dolerite)

LINEAR
(Strike and plunge shown by each symbol; number indicates value of plunge in degrees)

- Axis of first-order fold
- Axis of second-order fold
  (calculated from poles to foliation)
- Axis of third-order fold (calculated from three or more foliation measurements around the hinge of the fold. These measurements are not included in calculations of first- and second-order folds.)
- Clockwise rotation
- Counterclockwise rotation
  (sense of rotation)
- Axis of crenulate fold
- Rod (quartz or quartz and plagioclase)
- Mullion
- Mineral lineation (commonly elongate mica)
- Axis of rotation of plagioclase porphyroblast showing sense of rotation
- Boudin line
- Offset boudinage
  Clockwise rotation about boudin line
  Counterclockwise rotation about boudin line
- Joint columns determined from the intersection of more than two joints at a locality
- Generalized trace of axial surface of antiform: vertical, overturned. Queried where questionable
- Generalized trace of axial surface of synform: vertical, overturned. Queried where questionable

FAULTS

- Reverse fault: dashed where inferred, queried where questionable. Barbs on side of upper plate.
- Normal fault: dashed where inferred, queried where questionable. U, up; D, down.

MISCELLANEOUS

- Abandoned mine
- Possible fault contact (text reference)
- G — Graded bedding (text reference)
- A–A′–A″–A‴ Line of geologic section

Type Localities

10 Slashers Ledges Formation
9 Satans Kingdom Formation
8 Breezy Hill Member
7 Ratlum Mountain Member
6 Rattlesnake Hill Formation
5 Collinsville Formation
4 Taine Mountain Formation
3 Scranton Mountain Member

Reference Localities

2 The Straits Schist
1 Collinsville Formation

Base map by U.S. Geological Survey

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

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

APPROXIMATE MEAN DECLINATION, 1956

SCALE 1:24000

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

CONNECTICUT
QUADRANGLE LOCATION

Geology engraved and printed by
Williams and Heintz Map Corp

COLLINSVILLE, CONN.
N4145—W7252.5/7.5
1956