

Willimantic 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.

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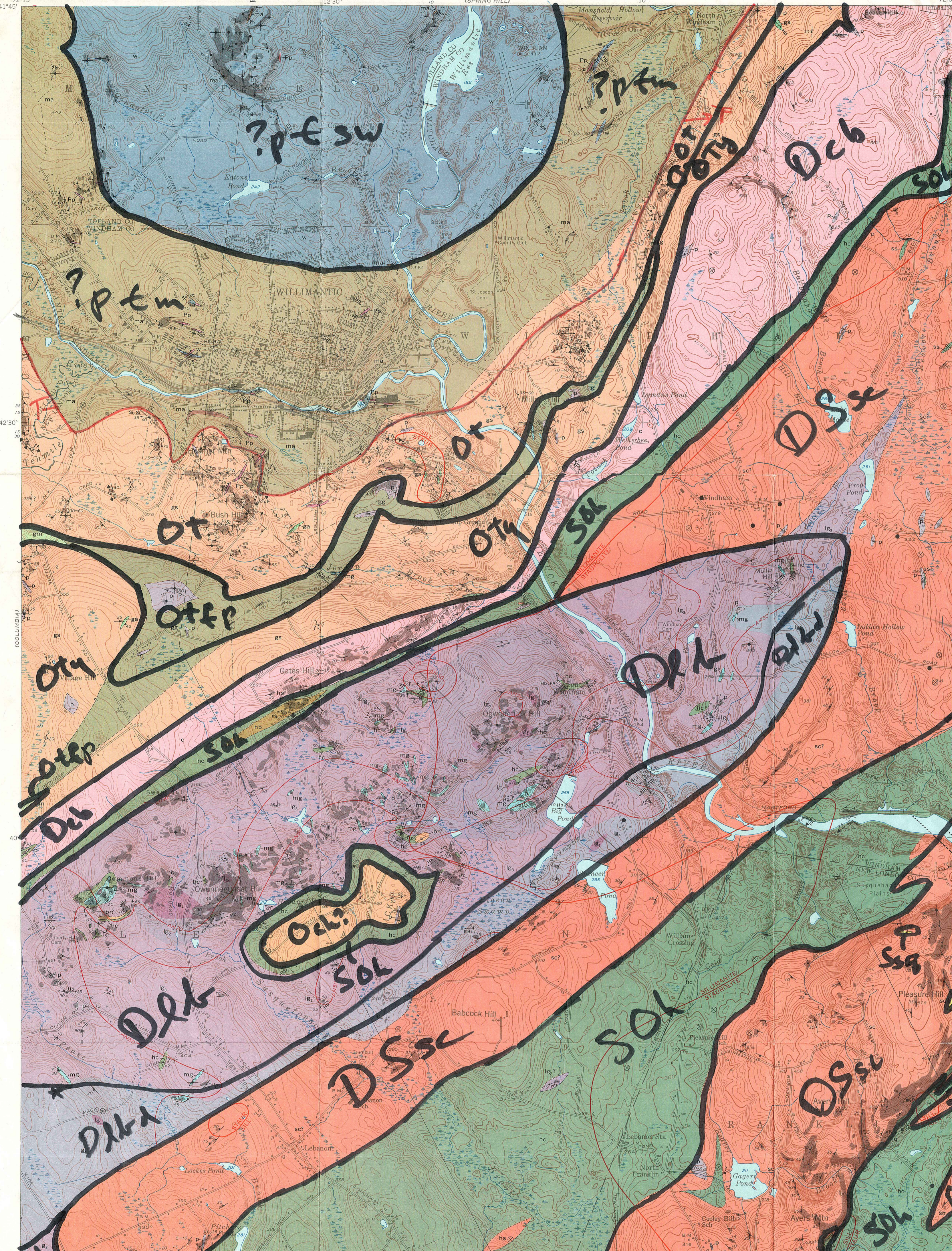
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Interpretation July 24, 26 July 1976

EXPLANATION

- Outcrop areas shown by darker shades
- IGNEOUS ROCKS**
- Pg**
Nonfoliated pegmatite
White to flesh-colored, exceptionally coarse grained classed as quartz-microcline-muscovite pegmatite with prominent comb structure in 1- to 12-inch wall zone. Includes rare calcite-biotite pegmatite and feldspar-quartz-hornblende pegmatite.
- METAGNEOUS ROCKS**
- P**
Foliated pegmatite
Very coarse grained gray-white foliated microcline-oligoclase-quartz pegmatite.
- mg**
Muscovitic gneiss
Uniform white to gray medium-grained muscovitic oligoclase-quartz gneiss.
- lg**
Lebanon Gabbro of Rodgers and others (1956)
Coarse-grained hypidiomorphic granular gabbro, dark-green to black resistant hornblende with 50 percent or more mafic minerals. Ig, dark-speckled mafic hornblende gabbro composed mainly of hornblende, calcic plagioclase, and magnetite-ilmenite. Averages 62 percent mafic minerals. Ig, spotted white to black hornblende-biotite gabbro and diorite composed mainly of calcic plagioclase, hornblende, biotite, quartz, and magnetite-ilmenite. Hornblende always more abundant than biotite; averages 37 percent mafic minerals. Includes minor anorthositic gabbro with 10 percent mafic minerals. Ig, streaked white to black biotite diorite composed mainly of plagioclase, biotite, hornblende, and quartz. Biotite always more abundant than hornblende which is absent locally; averages 30 percent mafic minerals; includes rare granite.
- C**
Canterbury Gneiss
Uniform medium-grained gray to white micaceous orthoquartzites ranging from tonalite to quartz monzonite in composition and averaging granodiorite or quartz monzonite.
- W**
Willimantic Gneiss¹
Light-colored medium- to coarse-grained foliate albite diorite or oligoclase quartz monzonite. Weathers either in long resistant ledges or gentle slopes of soft grass.
- METASEDIMENTARY ROCKS**
- sc**
Scotland Schist
sc, in the southeastern belt, silvery to rusty-weathering muscovite-biotite-staurolite-garnet schist and minor granular biotite schist, representing metashale; in the central belt, dull-gray stobby granular biotite schist and minor biotite-muscovite schist, representing metashale.
sg, gray-brown garnetiferous chlorite quartzite.
ss, fine-grained gray-green granular calc-silicate rock.
- g**
Gray-white muscovitic quartzite
- hc**
Hebron Formation
hc, interlayered fine-grained gray-green granular calc-silicate rock of varying composition, purple-brown calcareous biotite schist (representing impure metalmestones), and brown noncalcareous biotite schist.
hs, silvery to rusty-weathering muscovite schist.
hb, gray medium-grained layered biotite-garnet gneiss.
- gs**
Gneiss²
gs, gray to brown medium-grained sillimanite-garnet schist and gneiss, biotite gneiss, and biotite-muscovite schist representing metashale.
gs, layered gray-green medium- to coarse-grained hornblende-scapolite-diopside granofels; meta-limestone.
gm, diopside-scapolite-graphite marble, metalmestone.
ga, dark-green amphibolite and hornblende.
- br**
Brimfield(?) Schist
Bristly-weathering, granular medium-grained biotite-muscovite-garnet schist.
- ma**
Hornblende gneiss and related rocks
ma, medium-grained black-hornblende gneiss, mafic amphibolite, and biotite schist, and felsic biotite gneiss representing meta-dioritic basaltic to dacitic volcanics (?).
ma, light-colored albite-cordierite-chlorite schist with calcic druse (?), and pools of brucite.
- PERMIAN?**
- Contact
Dashed where approximately located; short dashed where gradual or inferred; queried where existence doubtful.
- - - Inferred fault
Dotted where concealed.
- SILLIMANTITE**
Mineral isograd
Based on first appearance of sillimanite in pelitic rocks, which is equivalent to first appearance of diopside, garnet and scapolite in calc-silicate rocks, and of garnet and scapolite in gabbro. Position of metamorphic zones shown by position of mineral names.
- ANNO**
An-contour in gabbro
Showing gradient of average muscovite content of primary plagioclase.
- PLANAR FEATURES**
- Inclined Vertical Horizontal Folded
Strike and dip of metamorphic schistosity or igneous foliation
Queried where existence doubtful. Generally parallel to compositional layering in metasediments. Includes some symbols that can be inferred to be overturned.
- Inclined Near-vertical Near-horizontal Quasivergent
General strike and range of dip of gently folded schistosity or foliation.
- Strike and dip of zone of prominent joints
- LINEAR FEATURES**
May be combined with planar features
- Inclined Horizontal
Bearing and plunge of lineation
- Tail of arrow at point of observation. Letter symbols indicate nature of lineation: B, biotite; F, feldspar; FA, minor fold axis; hb, hornblende; Ma, magnetite; Q, quartz; Si, sillimanite. If lineation is formed by more than one element, more than one letter symbol is shown. Underlined letter symbol (B) indicates that the lineation is formed by elongate clusters of whichever minerals are represented.
- MINOR FOLDS**
One fold or a group, map some of fold shown where determinable
- Strike and dip of inclined axial plane
Horizontal Anticline
Bearing and plunge of axis
May be combined with axial plane data
- Quarry
- Water well with rock chips available for examination during mapping
- Location of critical float judged to be close to source



Explanations

Dcb - Canterbury heavy gneiss

DSh - Lebanon gabbro

DSh - Dimitephand/Lebanon gabbro

DSh - Scotland schist

Ssg - Quartzite in Scotland schist

Soh - Hebron formation

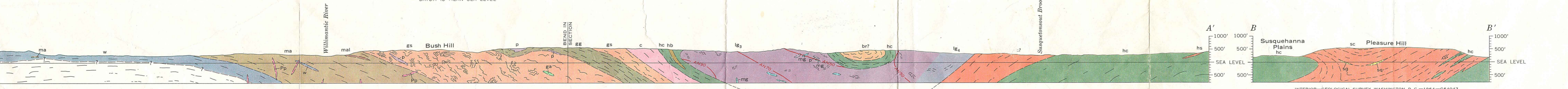
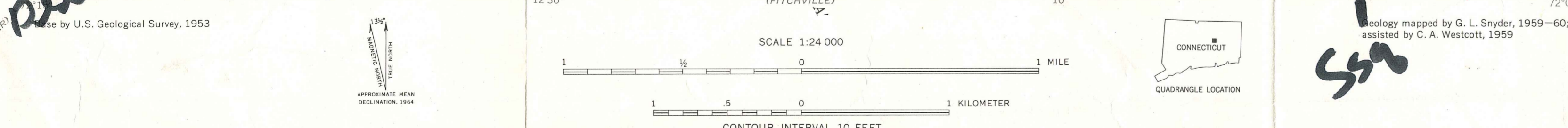
Oty - Gneiss member of Tertiary Hill formation

OT Ep - Fly Pond member of Tertiary Hill formation

BT - Tertiary Hill formation

?p f sw = Willimantic gneiss

?p f m - Mason gneiss



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