

South Canaan 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.

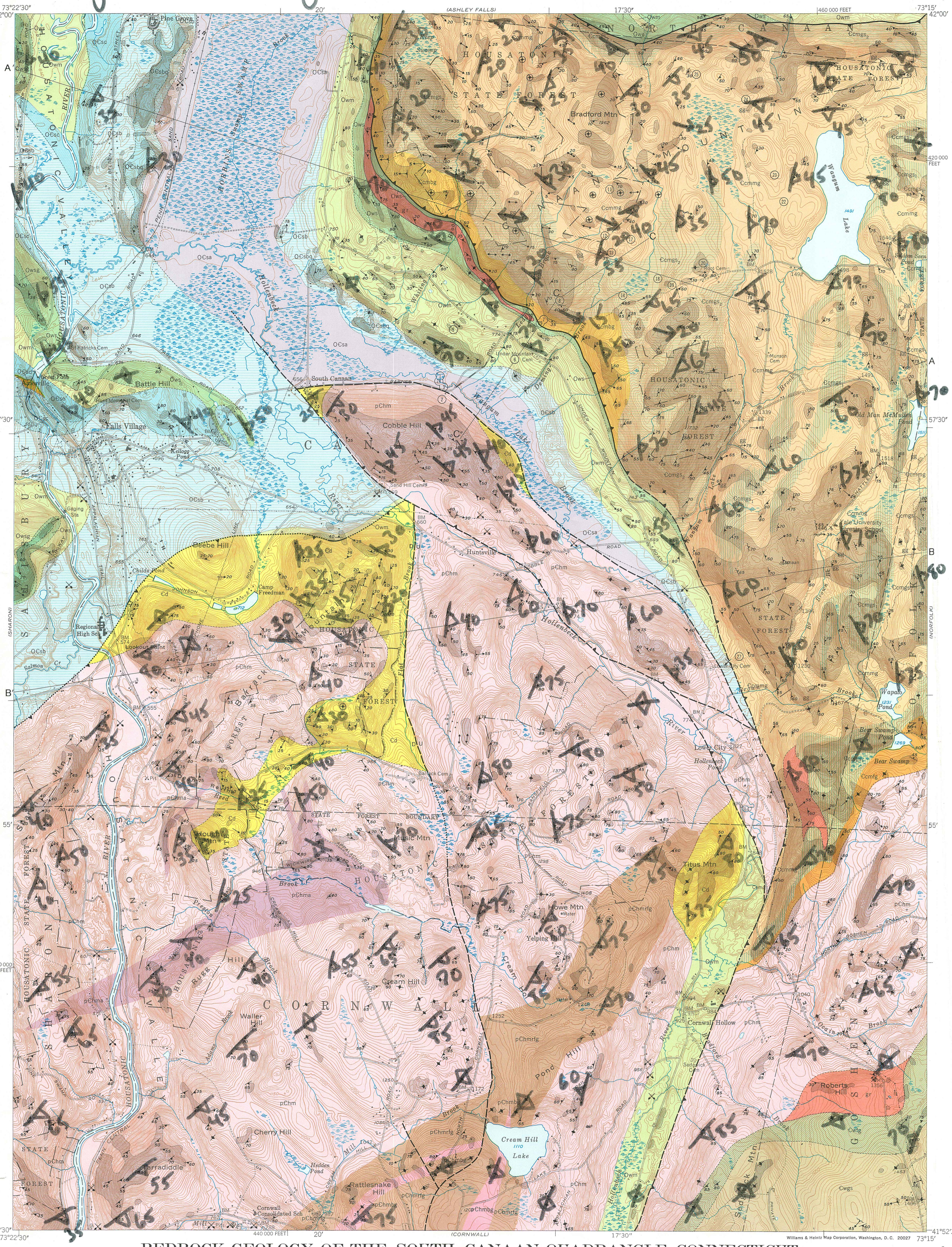
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M. S. Gates, 7 July 1977

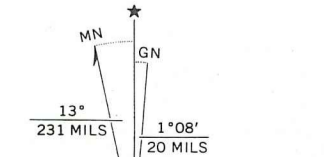
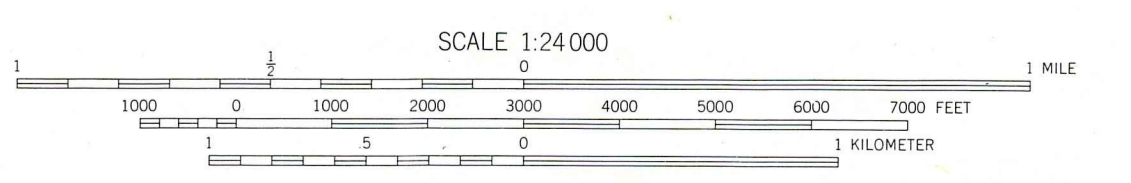


| ORDOVICIAN | |
|--|---|
| <p>Ows Owms</p> <p>Walloosac Formation</p> <p>Ows: Lustrous, silvery-gray to dark-gray muscovite quartz schist with abundant porphyroblasts of garnet and staurolite.</p> <p>Owa: Dark-gray to black, flaggy, granulite muscovite-biotite-plagioclase-quartz schist commonly characterized by small 1/8 - 1/4 in. clots of biotite.</p> <p>Owm: Interlayered, heterogeneous assemblage of schistose marble, massive white calcitic marble, gray to black, rusty-weathering impure quartzites, and gray-weathering calcite-dioxiptase-quartz granitite.</p> | |
| CAMBRIAN AND ORDOVICIAN | |
| <p>Ocas Ocasb Ocasq</p> <p>Stockbridge Formation</p> <p>Ocas: Mottled, white, gray, or cream-colored, coarse-grained calcite marble with minor micaceous quartz-schist layers.</p> <p>Ocasb: Interlayered assemblage of rusty-weathering quartzite, sheared, light-gray, fine-grained dolomite marble, brownish micaceous calcite marble, and calcite dolomite marble with white quartz pods.</p> <p>Ocasq: Massive to sheared, iron-gray to white, fine-grained calcite-cemented dolomite marble; white quartz pods, rusty-weathering quartz streaks, and coarse dolomite crystals characterize some layers; massive, friable white dolomite marble with white platy diopiastite streaks up to 1 in.</p> <p>Ocasb: Gray to white, calcite-cemented, fine-grained dolomite marble with fine brownish schist partings; 1-2 ft beds of rusty-weathering calcite, feldspathic quartzite, and quartzite beds common; craggy weathering surfaces.</p> <p>Ocasq: Very craggy weathering calcite-tremolite-quartz rock with subhedral of very coarse-grained tremolite.</p> | |
| <p>Ocas</p> <p>Ocas</p> <p>Stockbridge Formation</p> <p>Ocas: Massive, white, fine- to coarse-grained dolomite marble with sparse tremolite, diopside, and phlogopite.</p> | |
| <p>Cd</p> <p>Dalton Formation</p> <p>Interlayered gray-to tan-weathering, very fine-grained, thinly laminated, quartz-mica schist, gneiss, and granitite gneiss, two mica, quartz-feldspar schists with large black tourmaline porphyroblasts on foliation planes, and minor impure quartzites and diopside quartzite.</p> | |
| <p>Ccmg Ccmgs</p> <p>Canaan Mountain Formation</p> <p>Ccmg: Light-rusty to gray weathering, biotite two mica, plagioclase-quartz gneiss; generally smooth weathering in outcrop; grades into Ccmgs, as garnet and sillimanite increase in the mica-plagioclase-quartz gneiss and as layers of the garnet-sillimanite-bearing gneiss alternate with the plain two mica, plagioclase-quartz gneiss.</p> <p>Ccmgs: Coarse-grained massive appearing, gray-to rusty-weathering, garnet-sillimanite, two mica, plagioclase-quartz gneiss, and garnet-sillimanite; weathered surface is rough and bubbly owing to garnet and sillimanite; lithologically very similar to Ccmg.</p> <p>Ccmgs: Interlayered and intergradational assemblage of mixed gneisses; light rusty-weathering quartz-plagioclase granitite gneiss, two mica, plagioclase-quartz gneiss, and garnet-sillimanite, two mica, plagioclase-quartz gneiss; all rock types intergrade.</p> <p>Ccmgs: Gray, fine-grained, smooth-weathering biotite-quartz-plagioclase granitite or granitite gneiss; commonly occurs irregularly near contact with Ccmgs, and Ccmgs, and also within the swirl. Outcrop areas indicated by gg.</p> <p>Ccmgs: Coarse-grained, with tan-to gray-weathering, nubby, garnet-sillimanite, two mica, plagioclase-quartz gneiss with abundant accessory magnetite; weathered surface is rough and bubbly owing to garnet and sillimanite; lithologically similar to Ccmgs.</p> <p>Ccmgs: Medium grained, two mica, plagioclase-quartz gneiss with sparse knots of muscovite-sillimanite-quartz and with porphyroblasts of crossed muscovite; minor microcline.</p> | <p>Owms Owms</p> <p>Waramaug Formation</p> <p>Owms: Light rusty-weathering, nubby garnet-sillimanite, two mica, plagioclase-quartz gneiss with megalocopic accessory magnetite.</p> <p>Owms: Light tan-to gray-weathering, fine- to medium-grained muscovite-biotite-plagioclase-quartz gneiss.</p> |
| <p>pChm pChms</p> <p>Housatonic Highlands Massif</p> <p>pChm: Gray- to light-rusty-weathering, fine- to medium-grained granitite to two mica, quartz-plagioclase gneisses; mafic biotite-hornblende-quartz-plagioclase gneisses and amphibolites; these lithologies intergrade and are inter-layered on a scale ranging from an inch to tens of feet; calc-silicates and pelitic gneisses are subordinated.</p> <p>pChms: Gray-and-white banded, fine- to medium-grained granitic gneiss.</p> <p>pChmrg: Rusty-weathering quartz-plagioclase gneiss with variable amounts of biotite and with sparse muscovite-sillimanite knots.</p> <p>pChma: Fine- to medium-grained amphibolite.</p> | |
| PALEOZOIC PLUTONIC ROCKS | |
| <p>Gr</p> <p>Granite</p> <p>Syntectonic to post tectonic granitic; white to gray, fine- to medium-grained, massive to gneissic biotite granitic.</p> | |
| SYMBOLS | |
| OUTCROPS | |
| <p>Single outcrop or closely spaced outcrop.</p> | |
| <p>Contact</p> <p>Short dashed where approximately located; dotted where concealed by excessive soil or surficial deposits</p> | |
| <p>Thrust Fault</p> <p>Dashed where approximately located; dotted where concealed; teeth on upper plate.</p> | |
| <p>Steep Fault</p> <p>Dashed where approximately located; dotted where concealed; U, upthrown side; D, downthrown side.</p> | |
| <p>Inclined</p> <p>Strike and dip of beds or compositional layering</p> | |
| <p>Inclined</p> <p>Vertical</p> <p>Strike and dip of foliation</p> | <p>Generalized where undulatory</p> |
| <p>Horizontal</p> <p>Subhorizontal</p> <p>Strike and dip of foliation parallel to bedding or compositional layering.</p> | |
| <p>Inclined</p> <p>Horizontal</p> <p>Inclined</p> <p>Generalized where undulatory</p> | |
| <p>Note: All data recorded and plotted to nearest 5°.</p> | |
| <p>⊗</p> <p>Pit in sand, gravel or till</p> | <p>⊗</p> <p>Abandoned bedrock quarry</p> |
| <p>⓪</p> <p>Drill hole</p> | |

BEDROCK GEOLOGY OF THE SOUTH CANAAN QUADRANGLE, CONNECTICUT

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 1941 and 1944. Field checked 1948.
Revised 1956
Revisions of culture and drainage from aerial photographs taken 1969
Polyconic projection, North American datum
10,000-foot grid based on Connecticut coordinate system

By Robert M. Gates, 1964, 1966-1971



CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

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