

LEGEND

METAMORPHIC AND IGNEOUS ROCKS

- CO**
Concord granite
(Light-gray fine-grained to medium-grained massive to foliated granite, quartz monzonite, or granodiorite composed of pink feldspar, oligoclase, quartz, biotite, and some muscovite; locally has phenocrysts of pink feldspar.)
- sqd**
Spaulding quartz diorite
(Dark-gray medium-grained massive to well-foliated granodiorite and quartz diorite composed of oligoclase, andesine, potash feldspar, quartz, and biotite; aggregates of light and dark minerals give the rock a spotted appearance.)
- kqm**
Kinsman quartz monzonite
(Porphyritic coarse-grained dark-gray quartz monzonite, granodiorite, and quartz diorite composed of pink feldspar, oligoclase, quartz, biotite, and muscovite; phenocrysts of orthoclase or microcline rarely siliceous-andesine; chlorite commonly forms grains.)
- Amphibolite**
(Area where amphibolite dikes and sills are abundant.)
- olqd**
Quartz diorite and granodiorite
(Medium-grained gray to pink microporphritic weakly foliated granodiorite or quartz diorite, composed of oligoclase-andesine, potash feldspar, quartz, biotite, and muscovite.)
- Dlg, Dl, Dir, Di**
Littleton formation
(Bulk of formation (Di) is composed of mica schist, quartz-mica schist, sillimanite schist, and sillimanite-quartz schist. Concretions of actinolite granitoid, garnetiferous quartzite, and quartzite occur in some of the schist. Heavy quartzite member (Dl) composed of garnetiferous quartzite, garnetiferous quartzite, line-silicate granitoid, dark-colored fine-grained granitic quartz-biotite schist, and mica schist. Upper part of formation (Dl) is green and rusty weathering schist, concretions occur in many places.)
- Sc**
Clough quartzite
(Compact white to black quartzite, quartz conglomerate, and some thin beds of quartz-muscovite schist and quartz-garnet-muscovite schist.)
- Op**
Partridge formation
(Mica schist, mica-garnet schist, sillimanite-garnet schist, and muscovite quartzite of the Partridge formation is generally present between the Clough and Ammonoosuc formations but is too thin to show on the map in most places.)
- Oam**
Ammonoosuc volcanics
(Light-colored fine-grained quartz-feldspar-biotite granitic; dark-colored amphibolite and amphibolite gneiss.)

METAMORPHIC ZONES

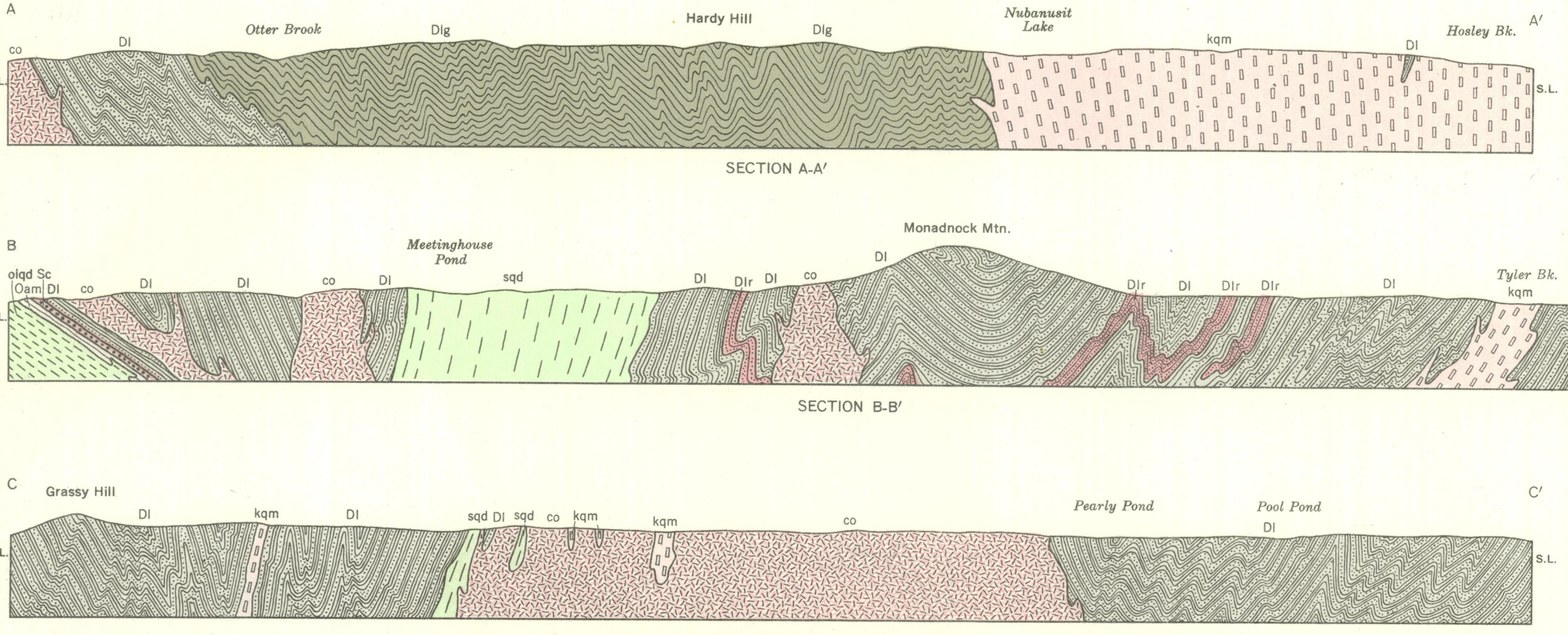
All metamorphism is high-grade

CONTACTS

- Accurate
- Approximate and diagrammatic due to poor exposure.
- Indefinite as sharp contact is lacking.

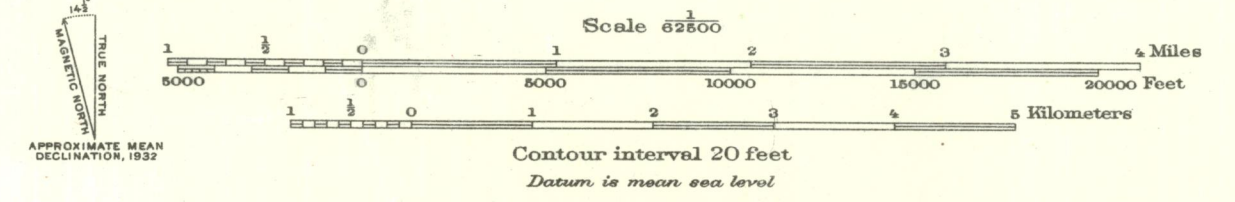
SPECIAL SYMBOLS

- Strike and dip of bedding.
- Strike of vertical beds.
- Horizontal bedding.
- Strike and dip of foliation and schistosity.
- Strike of vertical foliation and schistosity.
- Silicified zone.
- Pegmatite.
- Granite quarries, mostly abandoned; only the largest are shown.
- Abandoned gold mine.
- Abandoned graphite prospect.



GEOLOGIC MAP AND STRUCTURE SECTIONS OF THE MONADNOCK QUADRANGLE, NEW HAMPSHIRE

Topographic base by U. S. Geological Survey, surveyed in cooperation with the State of New Hampshire



Geology by Katharine Fowler-Billings assisted by L. Nolan, D. Mork, U. B. Chaisson. Geology surveyed in 1941, 1942, 1943, and 1946, with the aid of a grant from the Shaler Fund of Harvard University and funds from the N. H. Planning and Development Commission. Published 1949.