
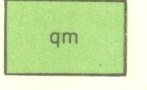
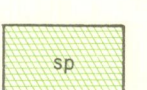

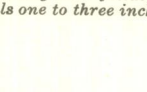
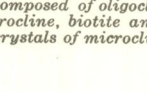
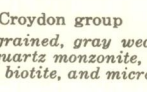
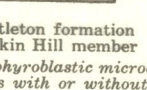
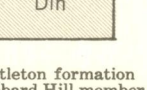
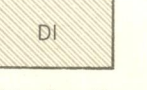

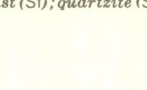


LEGEND  
METAMORPHIC AND IGNEOUS ROCKS

-  Concord granite  
(Medium- to fine-grained white or gray biotite-muscovite granite)
-  Quartz monzonite  
(Medium-grained light gray, composed chiefly of quartz, oligoclase-andesine, microcline, biotite and muscovite. Locally with microcline crystals up to one inch long.)
-  Spaulding quartz diorite  
(Medium- to fine-grained dark gray well foliated to massive quartz diorite and granodiorite composed of andesine, biotite, hornblende, quartz and potash feldspar.)
-  Kinsman quartz monzonite  
(Medium- to coarse-grained light gray quartz monzonite to quartz diorite composed of oligoclase or andesine, potash feldspar, quartz, biotite and muscovite. Sillimanite and garnet occur locally. Generally well foliated and with microcline crystals one to three inches long.)
-  Bethlehem gneiss  
(Medium- to fine-grained gray granite to quartz diorite gneiss, composed of oligoclase or andesine, quartz, microcline, biotite and muscovite. Commonly with crystals of microcline up to two inches long.)
-  Croydon group  
(Fine- to medium-grained, gray weakly foliated quartz diorite to quartz monzonite, composed of oligoclase, quartz, biotite, and microcline.)
-  Littleton formation  
Dakin Hill member  
(Zone h: chiefly porphyroblastic microcline gneiss, mica-quartz gneiss with or without sillimanite and garnet.)
-  Littleton formation  
Hubbard Hill member  
(Zone h: chiefly quartzite, mica-quartz schist and sillimanite schist with minor amounts of interbedded lime-silicate granulite and gneiss.)
-  Littleton formation  
Undifferentiated  
(Zone m: quartzite, mica-quartz schist, mica schist and staurolite schist. Zone h: sillimanite schist and mica-quartz schist.)
-  Fitch formation  
(Zones m and h: chiefly fine- to medium-grained, actinolite-feldspar and diopside-feldspar granulites and mica schist (Sf), quartzite (Sf), amphibolite (Sf).)
-  Clough formation  
(Zone m: chiefly quartz conglomerate, quartzite, and quartz-mica schist. Zone h: sillimanite schist, quartz-mica schist and quartzite.)
-  Ammonoosuc volcanics  
(Zones m and h: amphibolite, hornblende schist, and fine-grained biotite gneiss.)

LATE DEVONIAN? New Hampshire Magma Series  
MIDDLE DEVONIAN? Otterbean Magma Series  
DEVONIAN? Lower  
Middle  
SILURIAN  
Lower or Middle  
PROBABLY ORDOVICIAN? Upper?

METAMORPHIC ZONES

Shown below formation symbol thus:  $\frac{Dih}{h}$   
m = middle-grade  
h = high-grade

CONTACTS

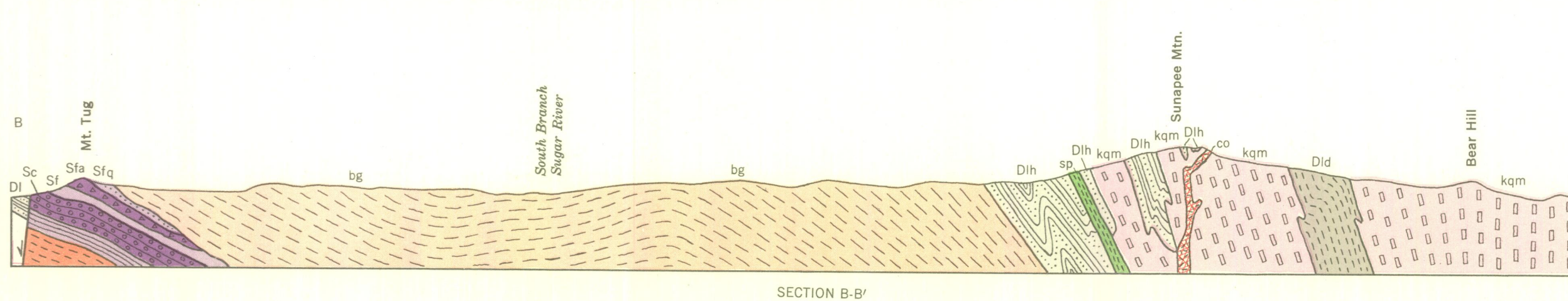
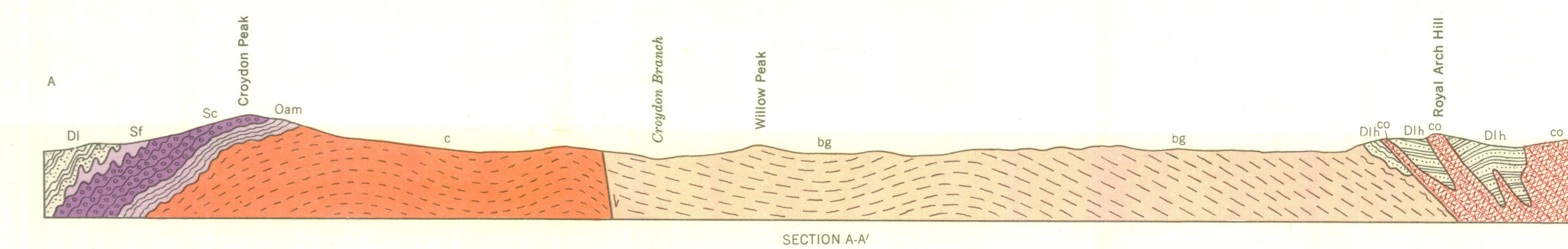
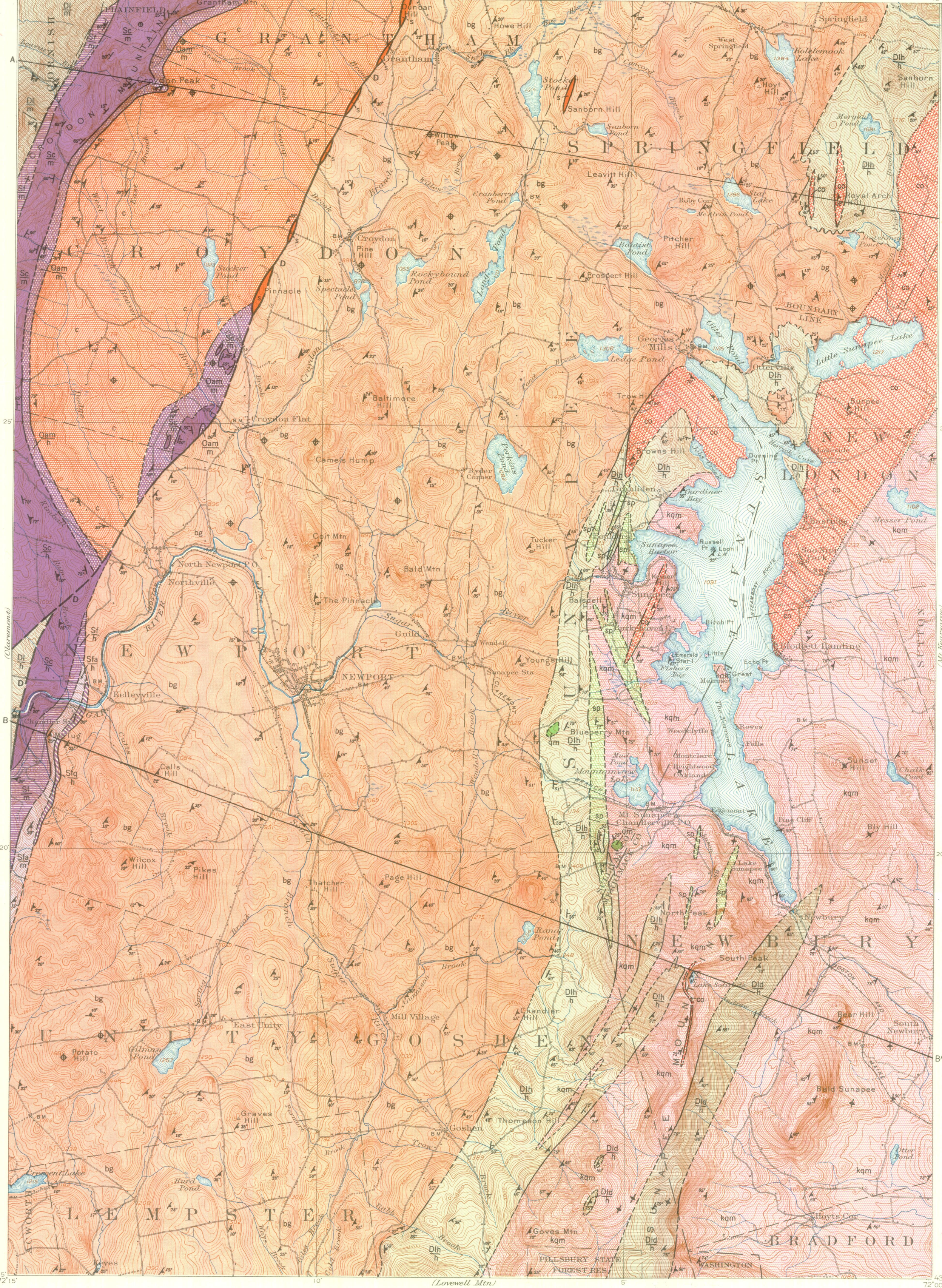
- Accurate
- Approximate and Inferred
- Gradational

SPECIAL SYMBOLS

- Strike and dip of bedding
- Strike of vertical beds
- Horizontal beds
- Strike and dip of foliation
- Strike of vertical foliation
- Horizontal foliation

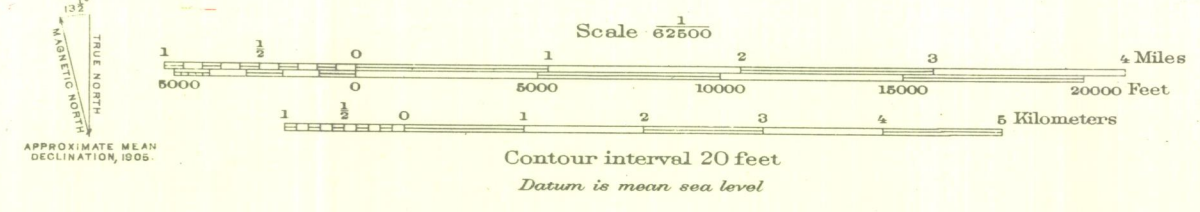
Normal fault; D on downthrown side

Sillified fault zone



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

Topographic base by U. S. Geological Survey. Surveyed in 1905



Geology by Carleton A. Chapman, assisted by R. W. Chapman, F. C. Kruger, J. H. Fisher, R. H. Shaver, D. H. Amos, H. H. Murray, R. S. Roth, W. H. Smith, and B. M. Gray. Geology surveyed in 1938, 1939, 1947, 1948, and 1949, with the aid of grants from the Research Board, University of Illinois, and the Shaler Memorial fund of Harvard University. Published 1952