

DESCRIPTION OF MAP UNITS

West Bridgewater Formation (Middle Ordovician)

Owb Black to dark gray, sulfidic to nonsulfidic, carbonaceous, fine grained, well foliated biotite-muscovite-quartz-phylite; contains pods and thin beds of medium dark gray and gray-and-white-mottled dolostone, thin beds of ankeritic quartzite, and, in upper part, rhythmically layered gray quartzite, limestone breccia and laminated silicic phyllite.

Ottauquechee Formation (Cambrian)

Co Predominantly dark gray to black, carbonaceous to highly graphitic, fine-grained sulfidic biotite-muscovite-quartz phyllite having silicic laminae. Includes black quartzites not mapped separately.

Coa Dark green plagioclase-hornblende (± quartz) amphibolite and rusty pale green, punky weathering ankeritic, chloritic greenstone.

Underhill Formation (Cambrian and Neoproterozoic)

Zun Silvery green quartz-muscovite-chlorite schist and phyllite, commonly with albite and magnetite; locally contains dolomite. Local lenses of white to pale gray quartzite, quartz-albite granofels, quartz-granule chlorite (±biotite) metawacke, and garnet schist.

Hazens Notch Formation (Cambrian and Neoproterozoic)

Zhn Schist, gneiss, and quartzite; dark rusty brown graphitic biotite-muscovite-chlorite-quartz (± garnet) schist and gneiss; black albite porphyroblasts, large euhedral pyrite, and beds of dark gray foliated quartzite are common. Unit includes rusty-weathering schist without graphite and rocks identical to Fayston Formation.

Zhng Dark green, pitted weathering, foliated mafic schist to massive greenstone containing varying amounts of chlorite, albite, carbonate, epidote, amphibole, and sphene; and amphibolite containing varying amounts of hornblende, actinolite, albite, chlorite, epidote, biotite, magnetite, and sphene.

Zhnp Chlorite-albite-epidote-carbonate greenstone, ± magnetite ± amphibole.

Fayston Formation (Lower Cambrian and Neoproterozoic)

Zf Silvery green to grayish green, medium-grained albite-chlorite-muscovite-quartz (± garnet ± magnetite) schist with white albite porphyroblasts. Locally contains light gray, thin quartzites; salt-and-pepper-colored, medium to coarse grained pyrite-magnetite-biotite-albite-quartz schist and gneiss; and silvery dark gray to rusty weathering, medium grained chlorite-tourmaline albite-muscovite-quartz schist.

Zfs Silvery green to rusty tan, fine-grained chlorite-quartz-sericite (± garnet ± chloritoid ± allanite) schist and phyllite.

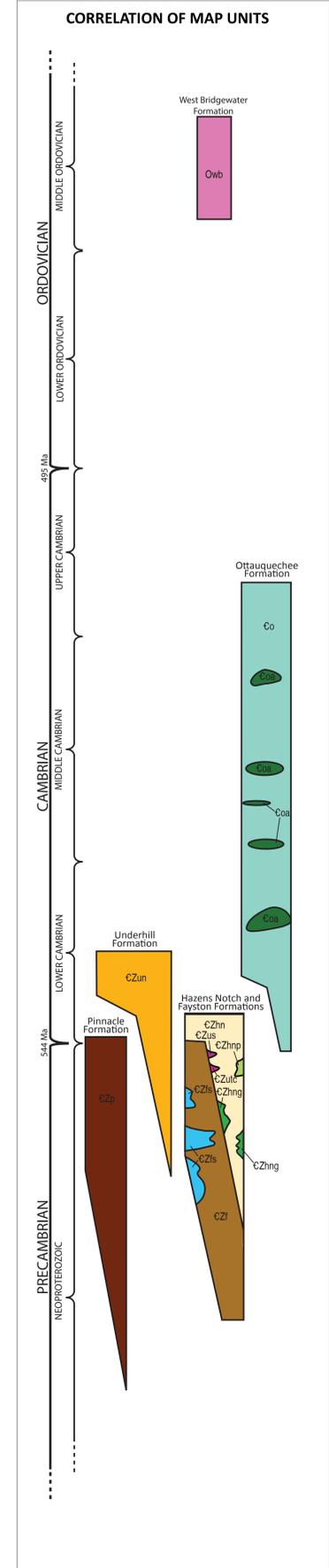
Pinnacle Formation (Cambrian and Neoproterozoic)

Zp Gray quartz-feldspar-biotite-chlorite-muscovite ± magnetite metawacke, schist and phyllite.

Ultramafic rocks (Cambrian and Neoproterozoic)

Zus Cream colored to light bluish gray, brown weathering, talc-carbonate schist and talc-carbonate-rich rocks.

Zut Brown weathering, dark green serpentinite.



DESCRIPTION OF MAP SYMBOLS

Linear Features

- F3 (Fn+1): fold axis
- L3 (intersection of Sn and S3)

Planar Features

- S0 (bedding)
- Sn (pervasive foliation)
- Sn+1 (spaced cleavage)
- fault-zone schistosity

Faults

- Post Sn fault
- Pre Sn fault

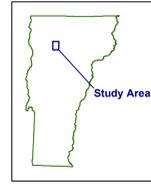
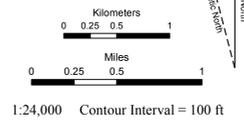
Other Map Symbols

- Quadrangle Boundary
- State/Town/Forest Road
- Trails
- Mount Mansfield State Forest Boundary
- Town Boundary
- Lakes/Ponds
- Rivers
- Green Mountain Anticlinorium Fold Axes

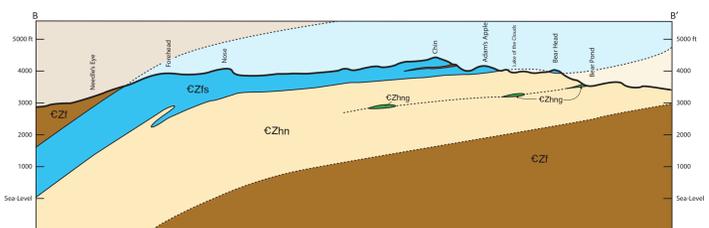
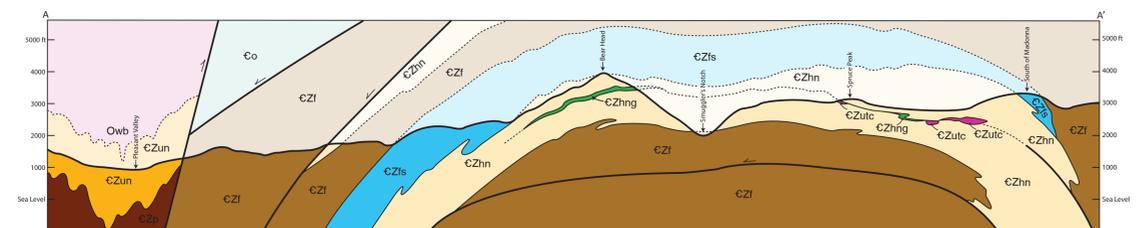
BEDROCK GEOLOGIC MAP OF THE MOUNT MANSFIELD 7.5 MINUTE QUADRANGLE, VERMONT

by
Peter J. Thompson and Thelma B. Thompson

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Digitization and digital cartography: Colin Dowe, Laura Cadmus, David Dreher, and Thomas Merryfield.



CROSS SECTIONS



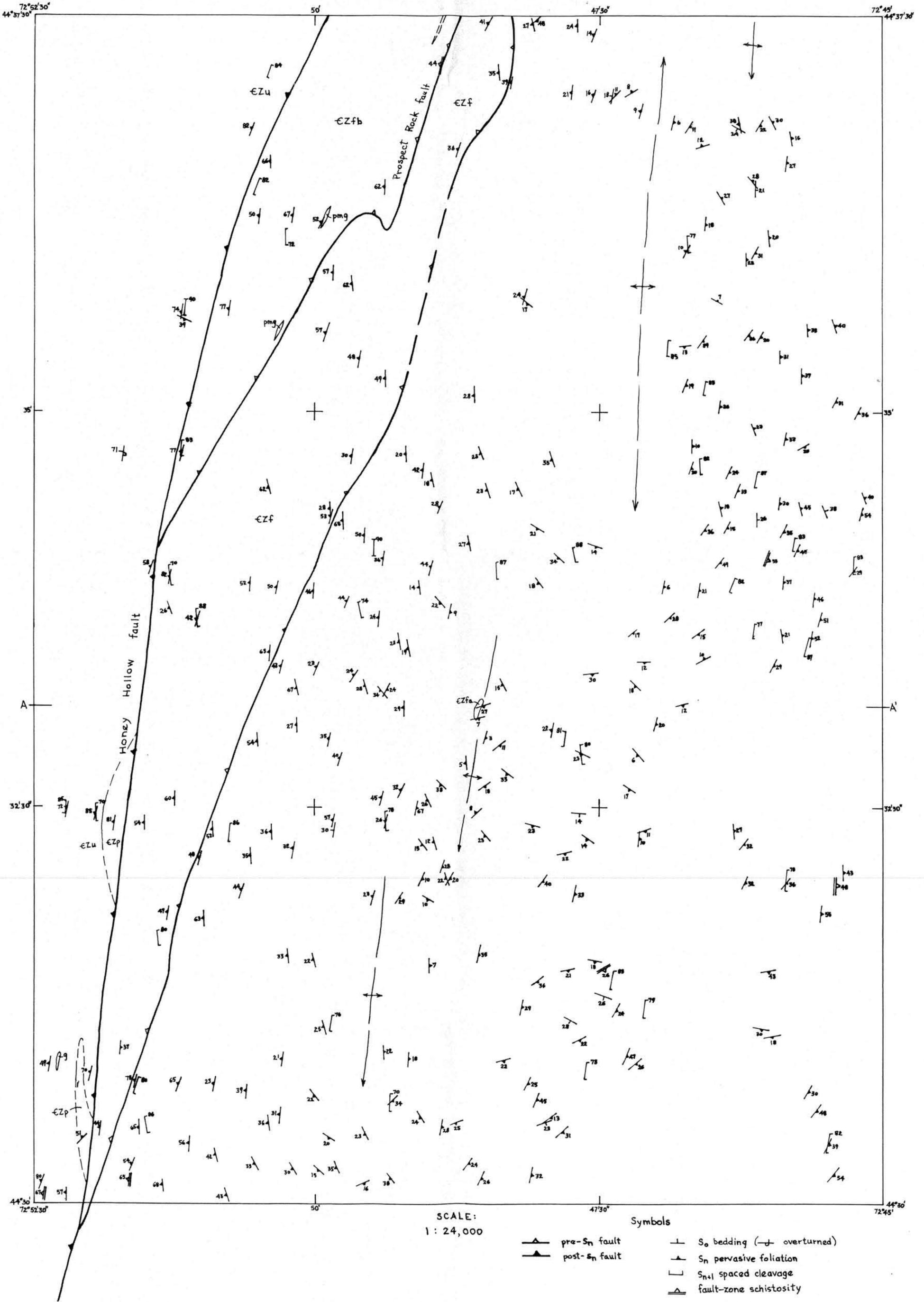
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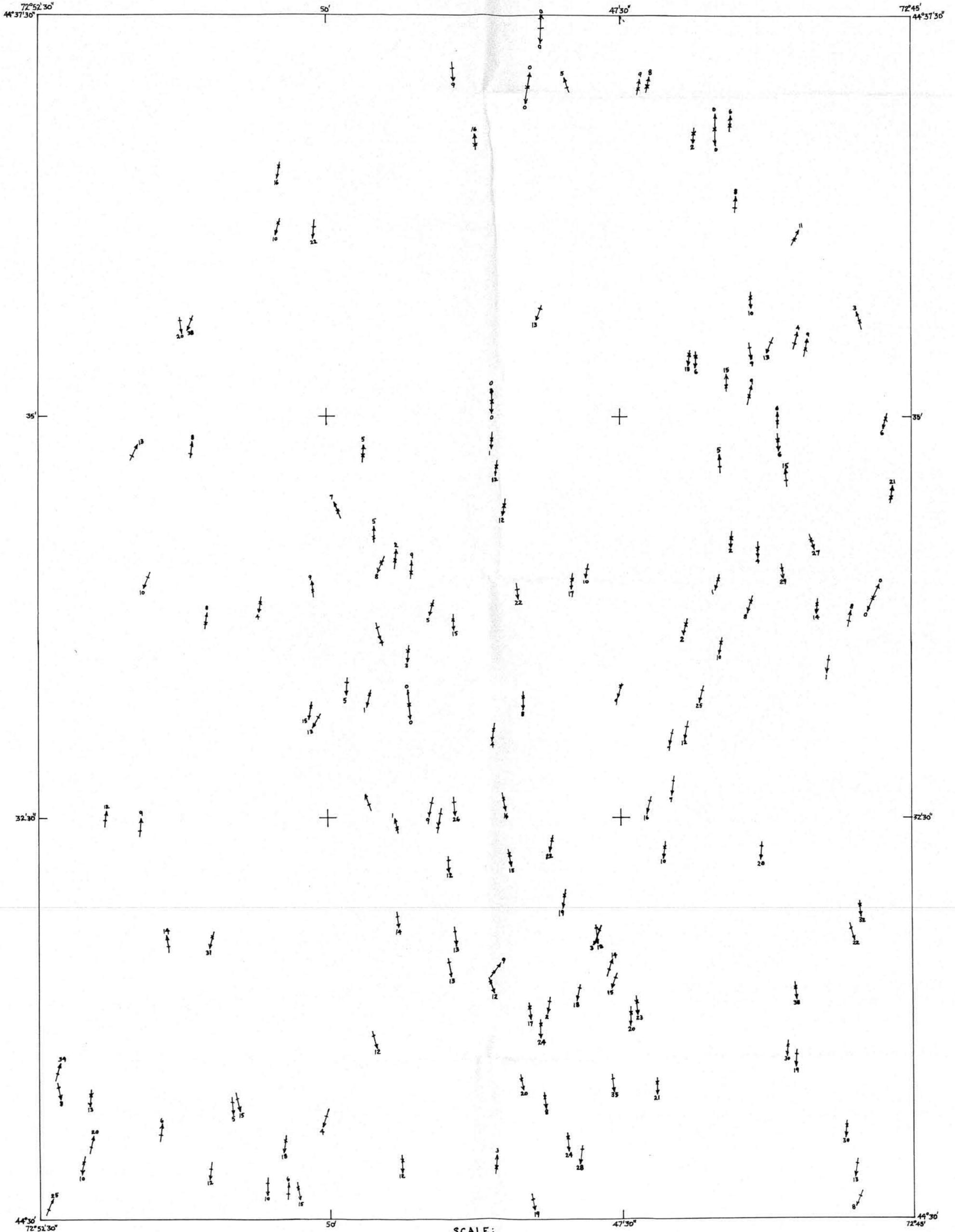
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Planar Structures — Mt. Mansfield Quadrangle, Vermont

P.J. & T.B. Thompson, August 1998

with significant revisions: extension of EZfb "Foot Brook rocks" and Prospect Rock fault south from Jeffersonville Quad.





SCALE:
1: 24,000

Symbols
→ F₃ (F_{n+1}) fold axis
↔ L₃ intersection s_n × s₃ (|| to crenulations)