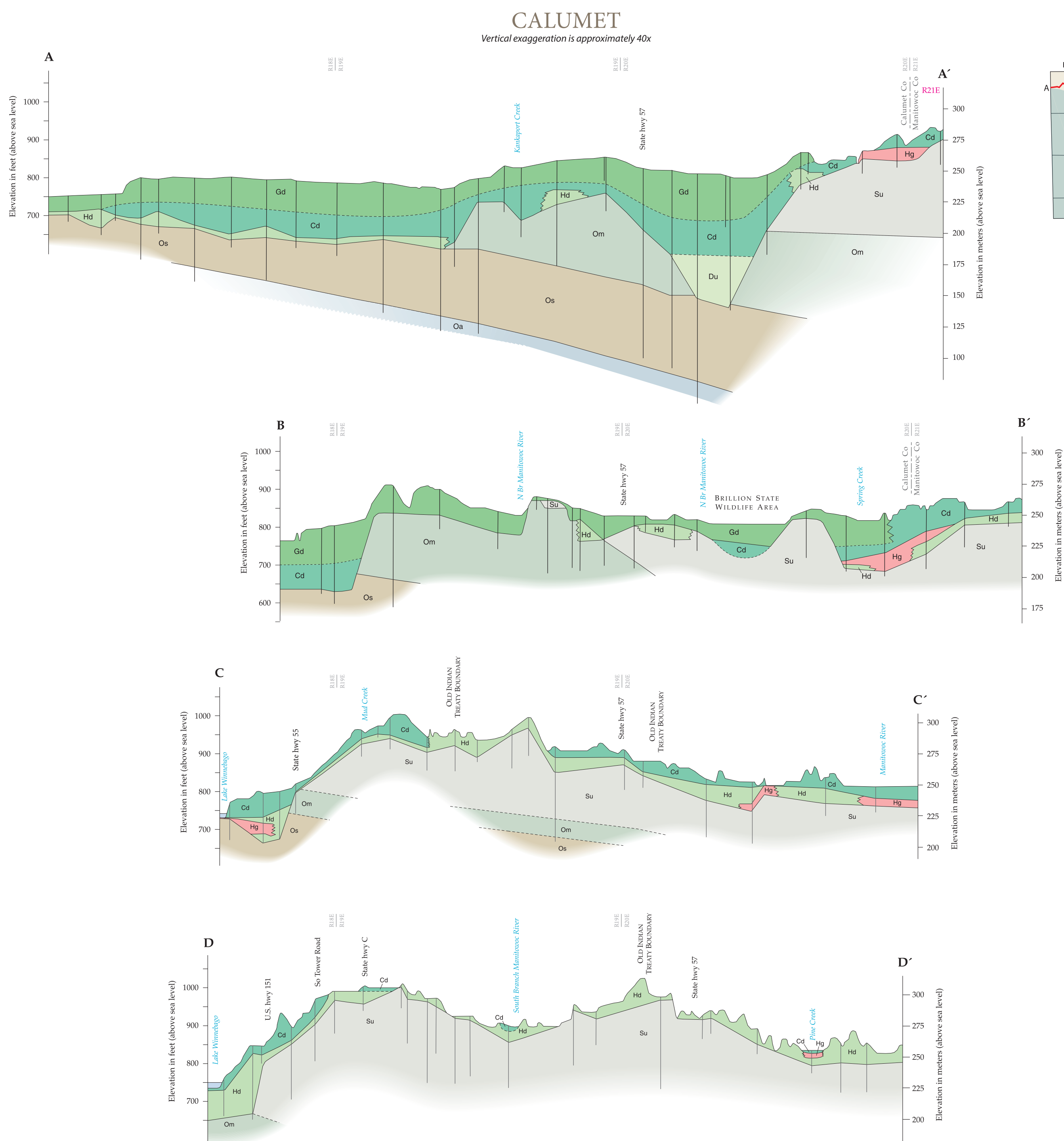


Geologic Cross Sections of Calumet and Manitowoc Counties, Wisconsin

D.M. Mickelson and B.J. Socha

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Calumet County geologic cross sections

B.J. Socha

Pleistocene Epoch

- Gd: Glenmore Member diamicton, silt and clay, undifferentiated. Mostly basal till with some glacial lacustrine sediment.
- Cd: Chilton Member diamicton, silt and clay, undifferentiated. Mostly basal till with some glacial lacustrine sediment.
- Hd: Holy Hill and Hayton Formation diamicton, undifferentiated. Mostly basal till with some fluvial sediment (sand and gravel).
- Hg: Holy Hill and Hayton Formation sand and gravel, undifferentiated. Mostly fluvial sediment (sand and gravel) with some diamicton.
- Hs: Drift, diamicton, sand and gravel, silt and clay, undifferentiated. Mostly Holy Hill and Hayton Formation sediments, but older units may be present.

Silurian Period

- Su: Silurian System, dolomite, undivided. Includes Cayugan, Niagaran and Alexandrian Series.

Ordovician Period

- Om: Maquoketa Formation. Shale, dolomitic shale, and dolomite.
- Os: Sennepet Group. Dolomite with some limestone and shale. Includes Galena, Decorah, and Plattville Formations.
- Oa: Ancell Group. Orthoquartzitic sandstone with minor limestone, shale, and conglomerate. Includes Glenwood and St. Peter Formations.

Source

Bedrock units modified from Mudrey, M.G., Jr., Brown, B.A., and Greenberg, J.K., 1982. Bedrock geologic map of Wisconsin, Wisconsin Geological and Natural History Survey Map 18, scale 1:1,000,000.

Manitowoc County geologic cross sections

D.M. Mickelson

Postglacial Deposits

- o: Organic sediment and alluvium. Peat, muck and poorly drained stream deposits shown only where extensive. All postglacial in age.

Kewaunee Formation

- Kd: Two Rivers Member diamicton, silt and clay. Mostly basal till with some glacial lake sediment.
- Cd: Chilton Member diamicton, silt and clay, undifferentiated. Mostly basal till with some glacial lake sediment.
- Vd: Valders Member diamicton, silt and clay. Mostly basal till with some glacial lake sediment.
- Osd: Ozaukee Member diamicton, silt and clay. Mostly basal till with some glacial lake sediment.
- Bd: Branch River Member diamicton, silt and clay. Mostly basal till with some glacial lake sediment.
- Kg: Kewaunee Formation gravel. Mostly sand and gravel with gravel dominating in abundance. Deposited by streams.
- Ks: Kewaunee Formation sand. Mostly sand and gravel with sand dominating in abundance. Deposited by streams and waves along Lake Michigan. Includes peat and till in areas too small to show.
- Ksl: Kewaunee Formation silt. Mostly laminated or massive silt, sand and clay. Deposited in former lakes.

Holy Hill Formation

- Hd: Holy Hill Formation diamicton. Mostly basal till with some stream sediment (sand and gravel).
- Hg: Holy Hill Formation sand and gravel, undifferentiated. Mostly stream sediment (sand and gravel) with some diamicton. Gravel dominates in abundance.
- Hs: Holy Hill Formation sand and gravel. Mostly stream sediment (sand and gravel) with some diamicton. Sand dominates in abundance.
- Hs-g: Holy Hill Formation undifferentiated diamicton, sand, and gravel.

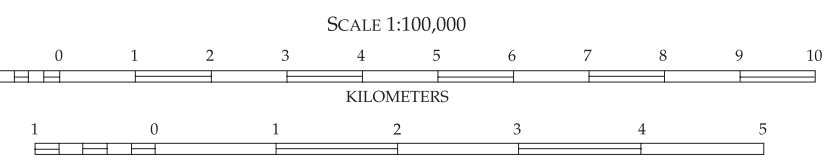
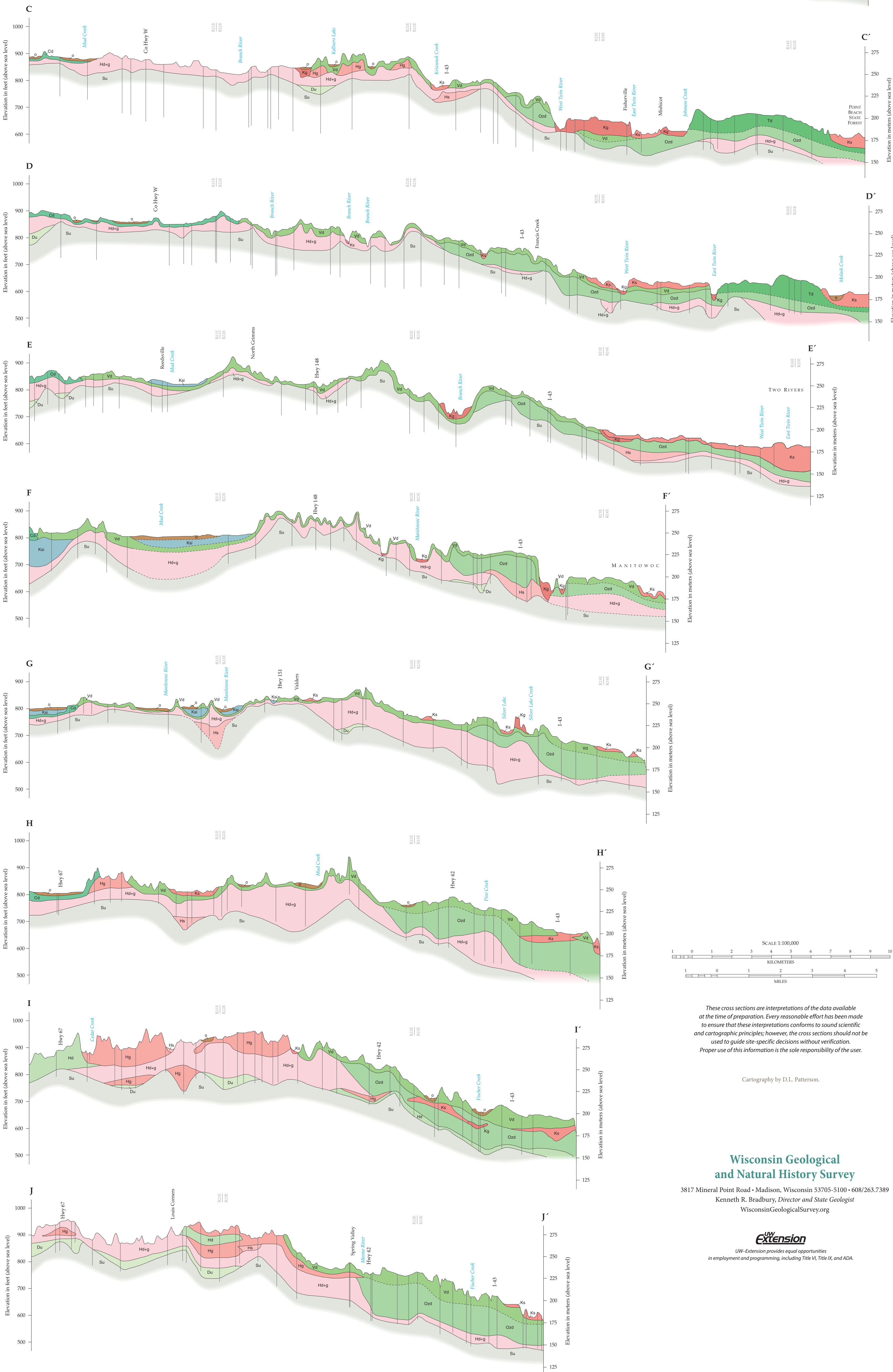
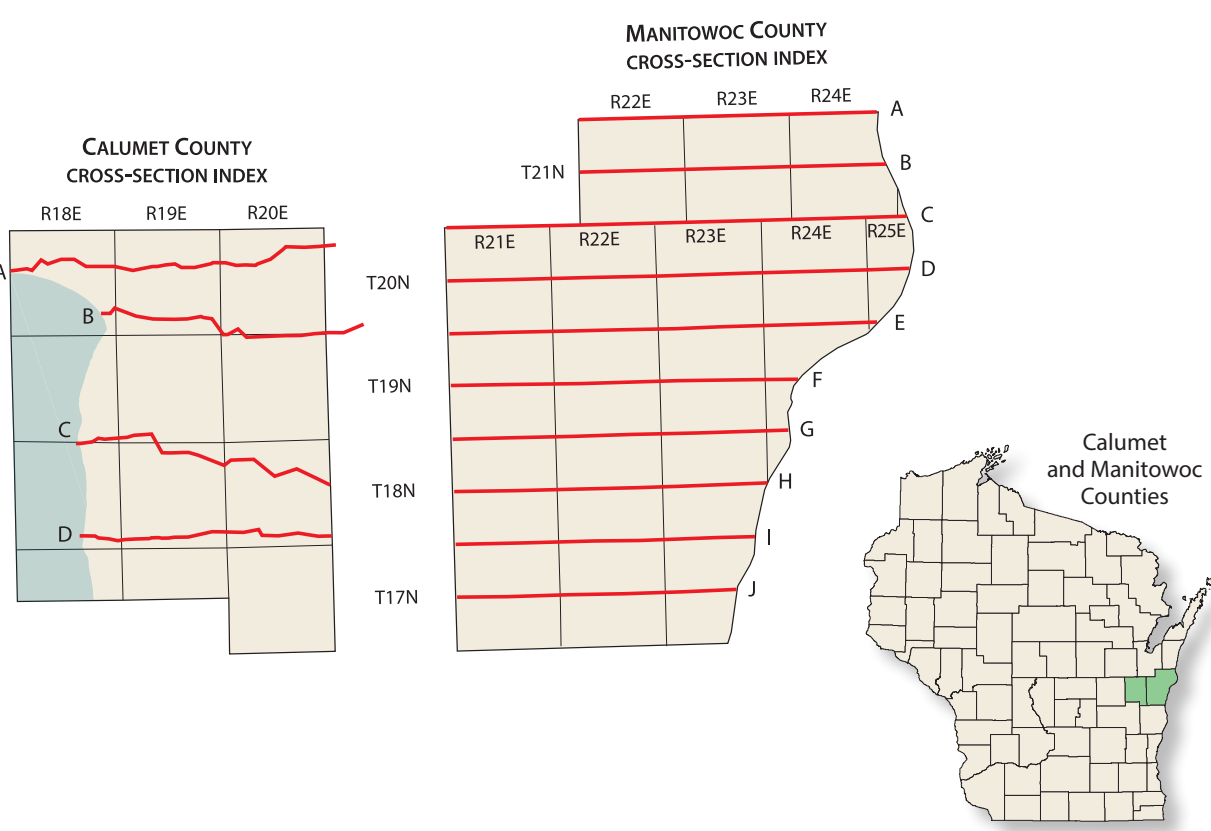
Hayton Formation

- Hd: Hayton and possibly older diamicton, sand and gravel, silt and clay, undifferentiated. Mostly Hayton Formation sediments, but older units may be present.

Bedrock

- Su: Silurian System, dolomite, undivided. Includes Cayugan, Niagaran and Alexandrian Series.

Note: The Manitowoc cross sections are diagrammatic in the sense that well data have been projected into the cross section line from up to 2 miles away. Thus, depths to bedrock and distribution of units are not exact along section lines. Interpretation of stratigraphic classification and material type is based mostly on well construction reports and not from drilling associated with this mapping project.



These cross sections are interpretations of the data available at the time of preparation. Every reasonable effort has been made to ensure that these interpretations conform to sound scientific and cartographic principles; however, the cross sections should not be used to guide site-specific decisions without verification. Proper use of this information is the sole responsibility of the user.

Cartography by D.L. Patterson.

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