Preliminary Quaternary Geology of Fond du Lac County, Wisconsin



Explanation

Postglacial deposits

Fill. Consisting of various materials including gravel, sand, silt, and clay.

Hillslope sediment. Primarily sand, silt, and clay eroded from adjacent upland areas; usually composed of till of the Kirby Lake Member of the Kewaunee Formation; typically 1 to 2 m thick.



Peat. Unit **p:** Peat occupying low-lying, flat to low-relief surfaces; thickness varies, but is typically 1 to 3 m thick. Unit **pg:** Peat over sandy till of the Horicon Member of the Holy Hill Formation. Unit **po:** Peat over lake sediment of glacial Lake Oshkosh; usually only occurs at elevations below 800 feet above sea level; may be beach sediment near margins of wetland. Unit **ps:** Peat overlying postglacial or meltwater stream sediment consisting of silty and sandy sediment with occasional occurrences of channel sand and silt.

s Stream sediment. Commonly consists of silty and sandy sediment with occasional occurrences of channel sand and silt; typically 1 to 15 m thick. Deposited in floodplains adjacent to postglacial streams; most was probably deposited during the Holocene.

Glacial deposits

l If Lake sediment. Unit I: Lake sediment consisting of sand, silt, and clay. Unit If: Sediment deposited in glacial Lake Fond du Lac, usually at elevations below 830 feet above sea level; largely silt and clay where deposited in deeper water grading to sand near the shoreline; typically 1 to 3 m thick; sediment deposited near the shoreline may include windblown sediment, washed hillslope sediment, and patches of peat that could not be separately mapped.



Meltwater-stream sediment. Sand and gravel deposited by streams originating from the margin of the Green Bay Lobe; commonly 1 to 30 m thick. Unit **sa:** Sediment deposited in an alluvial fan or delta immediately adjacent to a moraine or ice-contact face. Unit **su:** Sediment deposited in proglacial river channels. Unit **sc:** Collapsed meltwater-stream sediment deposited in alluvial fans, deltas, and proglacial river channels.

Kewaunee Formation

Kirby Lake Member



Till. Red clayey silt with some gravel deposited by the Green Bay Lobe during its first readvance; generally at least 3 m thick. Unit **gk:** Low-relief, nondescript glacial topography; till generally draped over pre-existing topography. Unit **gkl:** Similar to **gk** but covered with thin patches of lake sediment that are typically less than 2 m thick.

Holy Hill Formation

Horicon Member



Till. Brown to reddish brown gravelly, clayey, silty sand deposited by the Green Bay Lobe; generally at least 3 m thick; includes many small to large inclusions of windblown sediment, hillslope sediment, and glacial lake sediment that could not be mapped separately. Unit **ghr:** Generally has rolling topography in areas lacking drumlins. Unit **ghs:** Rolling topography that was subglacially molded; contains streamlined landforms including drumlins and flutes.

Bedrock

Bedrock. Dolomite, sandstone, quartzite, or granite; glacially scoured areas of bedrock near the ground surface covered by less than 2 m of various sediment such as the sandy till of the Holy Hill Formation or sand and gravel.

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Cartography by D.L. Patterson

Symbols



Moraine crest.

Ice-margin position. Interpreted position of maximum extent of readvance of ice or position of ice-margin stability where ice-contact face or end moraine is missing.



Stream cutbank. Hachures point toward stream channel center line.

88°45′



Sand dune. Arrow indicates wind direction.

Steep slope. Hachures point downslope.

Meltwater channel. Arrow indicates direction of flow.

Esker. V points in direction of water flow.

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Wisconsin Transverse Mercator Projection 1991 adjustment to the North American Datum of 1983 (NAD 83/91). The base map was constructed from U.S. Geological Survey digital line graph files (1990, scale 1:100,000)

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