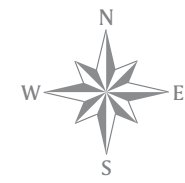


# Quaternary Geology of Fond du Lac County, Wisconsin

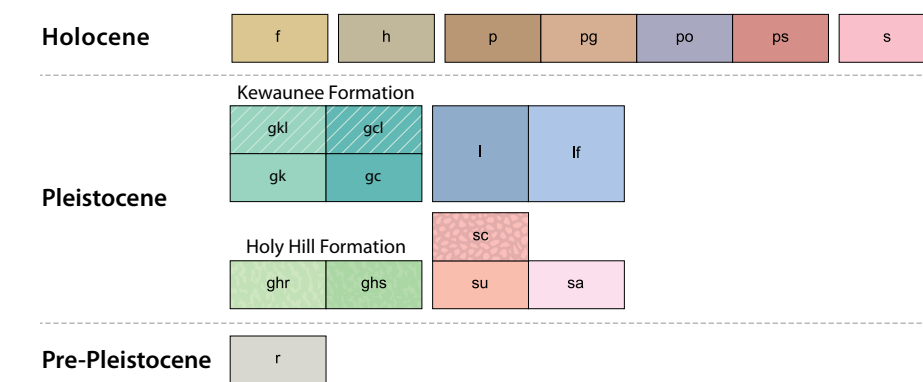
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Bulletin 116 • 2021  
Plate 1



## Correlation of map units



## Explanation

### Postglacial deposits

- f** **Fill.** Consists of various materials including gravel, sand, silt, and clay.
- h** **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.
- p** **Peat.** Unit p: Organic-rich sediment consisting of decomposed plant matter occupying low-lying, flat to low-relief surfaces; thickness varies, but is typically 1 to 3 m thick. Unit pg: Peat overlying 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 less than 800 ft above sea level; may be beach sediment near margins of wetlands. Unit ps: Peat overlying postglacial or meltwater stream sediment consisting of silty and sandy sediment and some channel sand and silt.
- s** **Stream sediment.** Typically consists of sand and silt that was deposited on floodplains adjacent to modern streams; typically 1 to 15 m thick; most of this sediment was probably deposited during the Holocene.

### Glacial deposits

- I** **Lake sediment.** Unit I: Lake sediment consisting of sand, silt, and clay. Unit If: Sediment deposited in glacial Lake Fond du Lac, usually between elevations of 830 and 850 ft 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.
- sa** **Meltwater-stream sediment.** Sand and gravel deposited by streams originating from the margins of the Green Bay and Lake Michigan Lobes; commonly 1 to 30 m thick. Unit su: Sediment deposited in an alluvial fan or delta immediately adjacent to a moraine or ice-contact face. Unit sc: Sediment deposited in proglacial river channels. Unit ss: Collapsed meltwater-stream sediment deposited in alluvial fans, deltas, and proglacial river channels.

### Kewaunee Formation

#### Kirby Lake Member

- gk** **Till.** Red, clayey silt with some gravel deposited by the Green Bay Lobe during its first readvance; generally at least 3 m thick. Unit gkl: Low-relief, nondescript glacial topography; till generally draped over pre-existing topography. Unit gkl: Similar to gk but covered with thin patches of glacial Lake Oshkosh sediment that are typically less than 2 m thick. The Kirby Lake Member is located west of Lake Winnebago and the Fond du Lac River.

#### Chilton Member

- gc** **Till.** Red, clayey silt with some gravel deposited by the Lake Michigan Lobe during its first readvance; generally at least 3 m thick. Unit gcl: Low-relief nondescript glacial topography; till generally draped over pre-existing topography. Unit gcl: Similar to gc but covered with thin patches of glacial Lake Oshkosh sediment that are typically less than 2 m thick. The Chilton Member is located east of Lake Winnebago and the Fond du Lac River.

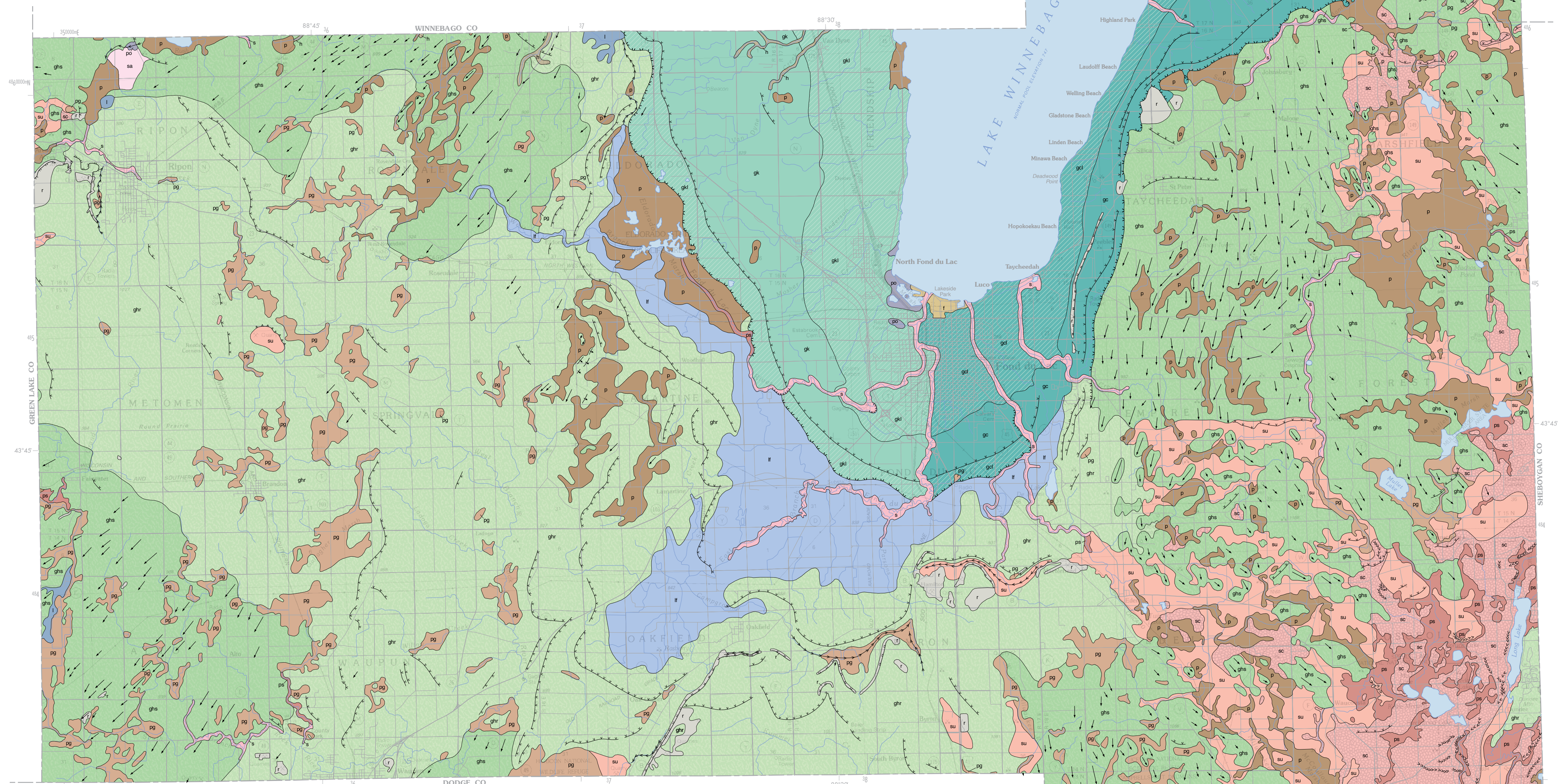
### Holy Hill Formation

#### Horicon Member

- ghr** **Till.** Brown to reddish-brown, gravelly, clayey, silty sand deposited by the Green Bay and Lake Michigan Lobes; generally at least 3 m thick. Unit ghs: Generally rolling topography lacking drumlins. Unit ghs: Rolling topography that was subglacially molded; contains streamlined landforms including drumlins and flutes.

### Bedrock

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



Cartography by D.L. Patterson.

## Symbols

- Geologic contact.** Position shown on map is generally within 200 m of actual position.
- 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.
- Ice-contact face.**
- Stream cutbank.** Hachures point toward stream channel center line.
- Drumlin.** Shows bearing and direction of ice flow. Length of arrow is proportional to length of axis; arrow points in the direction of flow.
- 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.

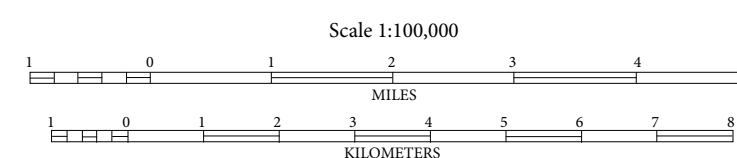
This map is an interpretation of the data available at the time of preparation. Every reasonable effort has been made to ensure that this interpretation conforms to sound scientific and cartographic principles; however, the map should not be used to guide site-specific decisions without verification. Proper use of the map is the sole responsibility of the user.



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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) and modified by the Wisconsin Department of Natural Resources (1992) and the Wisconsin Geological and Natural History Survey (2012).

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