Wisconsin Geological and Natural History Survey
Bulletin 105
Quaternary Geology of Winnebago County, Wisconsin
Plate 1

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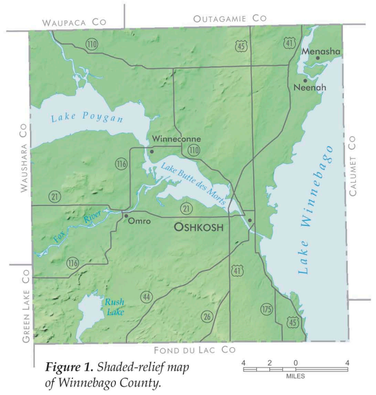

Figure 1. Shaded-relief map of Winnebago County.

Explanation

Peat. Unit **p:** peat on low-lying, flat to low-relief surfaces; typically between 1 and 3 m thick. Unit **pl:** peat over lake sediment. Unit **pg:** peat overlying sandy till of the Horicon Member of the Holy Hill Formation or clayey and silty till of the Kirby Lake Member of the Kewaunee Formation.

Postglacial stream sediment. Commonly consists of silty, clayey sediment and some channel sand and silt; typically between 1 and 15 m thick. Unit **s:** deposited in floodplains adjacent to postglacial streams. Unit **sp:** similar to unit **s,** but commonly overlain by peat less than 1 m thick.

Hillslope sediment. Primarily sand, silt, and clay eroded from adjacent upland areas (those areas mapped as unit **gk**); usually between 1 to 2 m thick.

Windblown sand. Unit **w:** between 2 and 7 m thick, dunes generally no more than 5 m high; most sand deposited immediately following deglaciation. Unit **wg:** overlies red, clayey, silty till of the Kirby Lake Member of the Kewaunee Formation. Unit **wl:** overlies lake sediment.

Lake sediment of the Kewaunee Formation, undifferentiated. Sediment of glacial Lake Oshkosh. Unit **l:** largely sand near the shoreline, grading to silt and clay where deposited in deeper water; typically between 1 m and tens of meters thick. Unit **lw:** lake sediment covered with thin patches of windblown sand; generally less than 2 m thick.

Meltwater-stream sediment. Silty sand and gravel deposited directly by streams originating from the margin of the Green Bay Lobe; commonly between 1 m and several tens of meters thick. Unit **sa:** meltwater-stream sediment deposited in an alluvial fan or delta immediately adjacent to a moraine. Unit **su:** meltwater-stream sediment deposited in proglacial river channels or in tunnel channels beneath the margin of the Green Bay Lobe. Unit **se:** eroded meltwater-stream sediment; postglacial erosion resulted in gullied topography.

Till of the Middle Inlet Member of the Kewaunee Formation. Red, clayey silt with some gravel deposited by the Green Bay Lobe; generally at least 3 m thick.

Till of the Kirby Lake Member of the Kewaunee Formation. Red, clayey silt; contains some gravel deposited by the Green Bay Lobe; generally at least 3 m thick. Unit **gk:** low-relief, nondescript topography; generally draped over pre-existing topography; till in places less than 3 m thick. Unit **gkw:** similar to unit **gk,** but covered with thin (less than 2 m thick) patches of windblown sand. Unit **gkl:** similar to unit **gk,** but covered with thin (generally less than 2 m thick) patches of lake sediment.

Till of the Horicon Member of the Holy Hill Formation. Yellow-brown to reddish-brown, gravelly, clayey, silty sand deposited by the Green Bay Lobe; generally at least 3 m thick. Unit **gh:** areas of rolling topography and no drumlins. Unit **ghw:** similar to unit **gh,** but covered with thin (generally less than 2 m thick) patches of windblown sand. Unit **ghs:** areas of rolling topography with drumlins. Unit **ghd:** areas of low-relief, nondescript topography; till is generally draped over pre-existing topography.

Bedrock. Ordovician dolomite and sandstone and Cambrian sandstone. Many of these areas contain quarries that once were covered with less than 1 m of glacial sediment.

Symbols

- Contact
- Moraine crest
- Ice-margin limit
- Meltwater channel
- Drumlin crest
- Steep slope

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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 (2004).

Scale 1:100,000
1 0 1 2 3 4 5 6 7 8 9 10
KILOMETERS
1 0 1 2 3 4 5
MILES

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.

Plate 1. Quaternary Geologic Map of Winnebago County, Wisconsin.