

Nelson R. Ham and John W. Attig  
 1997

**EXPLANATION**

**POSTGLACIAL SEDIMENT**

- p** Postglacial sediment of low, typically wet areas. Unit p: peat, muck, or slope sediment covering the glacial, stream, or lake sediment indicated by adjacent map units; low-lying, flat to low-relief surfaces.
- sp** Postglacial stream sediment. Unit sp: silty and sandy sediment deposited by postglacial streams; flat to low-relief floodplains. Mapped where extensive; present but not shown along most streams.

**MELT-WATER-STREAM SEDIMENT**

- sc** Meltwater-stream sediment of the Copper Falls Formation. Unit sc: sand, sandy gravel, and gravelly sand deposited by streams carrying meltwater away from the Wisconsin Valley and Langlade Lobes; typically coarser near former positions of the ice margin; flat to low-relief surfaces; some collapse depressions (pits) present. Probably includes some meltwater-stream sediment of the Lincoln Formation in the southern part of the county. Unit scs: sand, sandy gravel, and gravelly sand deposited on ice; moderate to high-relief surfaces. Original depositional surfaces generally not preserved because of collapse resulting from melting of buried ice.
- sl** Meltwater-stream sediment of the Lincoln Formation. Unit sl: sand, sandy gravel, and gravelly sand deposited by meltwater streams flowing away from the ice that deposited till of the Merrill Member of the Lincoln Formation; flat to low-relief surfaces with some collapse depressions (unit sl) and hilly areas (unit slc); extensive deposits are found in the Pine and Prairie River valleys and along Devil Creek. Unit su: meltwater-stream sediment of the Copper Falls and Lincoln Formations, undifferentiated.

**LAKE SEDIMENT**

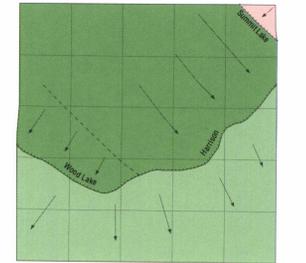
- lc** Lake sediment of the Copper Falls Formation, deposited in ice-walled or ice-marginal lakes—Unit lc: fine sandy, silty, and clayey laminated offshore sediment; sandy nearshore fans present in places; low-relief, flat, bowl-shaped, or convex-upward surfaces. Ice-walled-lake plains are common in the areas of hilly topography that mark the former marginal zone of the Wisconsin Valley Lobe (unit gwh) and typically form the highest parts of the landscape in areas of high-relief hilly topography in the eastern part of the county. Rim ridges typically contain sandy to gravelly, in places poorly sorted, nearshore sediment. Unit lch: area of hilly topography underlain primarily by variable, collapsed lake sediment, and supraglacial debris-flow and meltwater-stream sediment; collapse topography resulted from melting of buried ice. Unit lu: lake sediment of the Copper Falls and Lincoln Formations, undifferentiated; similar to unit lc.

**GLACIAL SEDIMENT**

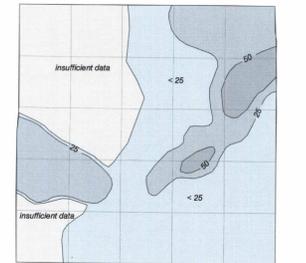
- gw** Glacial sediment of the Wildcat Lake and Nashville Members of the Copper Falls Formation. Areas of gently rolling to low-relief hilly topography—Unit gw: Wildcat Lake Member. Noncalcareous, unsorted, reddish-brown, slightly gravelly and clayey, silty, sandy till deposited by the Wisconsin Valley Lobe; low to moderate relief; deposits are streamlined in northwestern part of county. May be locally draped by up to several meters of variable supraglacial sediment. Unit gwd: same as unit gw but draped by up to several meters of well sorted sand and gravelly sand. Unit gu: till of the Wildcat Lake Member of the Copper Falls Formation and Merrill Member of the Lincoln Formation, undifferentiated.
- gwh** Areas of moderate to high-relief hilly topography—Unit gwh: Wildcat Lake Member. Collapsed supraglacial sediment; typically brown to reddish-brown, slightly clayey, silty, gravelly sand; poorly sorted to crudely stratified; includes many small areas of collapsed, sorted, meltwater-stream and lake sediment; deposited on stagnant ice of the Wisconsin Valley Lobe. Unit gnh: Nashville Member. Probably similar to unit gwh, but deposited by the Langlade Lobe; no exposures noted in county. Contact between units gwh and gnh is poorly controlled. Unit guh: collapsed supraglacial sediment of the Wildcat Lake Member of the Copper Falls Formation and Merrill Member of the Lincoln Formation, undifferentiated.
- gm** Till of the Merrill Member of the Lincoln Formation in areas of rolling to slightly hilly topography. Noncalcareous, typically unsorted, reddish-brown, slightly gravelly and clayey, silty, sandy till; gently rolling topography (unit gm) and slightly hilly topography (unit gmh). Crudely stratified to sorted supraglacial sediment is present in places. Topography of the Merrill till surface, in southern part of county, is controlled primarily by topography of the underlying bedrock surface. Precambrian bedrock is close to, or at the surface in many places on uplands.



Base map from U.S. Geological Survey County Map Series (Topographic), 1966.



Glacial phases and ice-flow direction (arrows).



Thickness of Pleistocene sediment (contour interval, 25 m). Pleistocene sediment is typically less than 15 m thick on uplands in the southeastern part of the county.

**SYMBOLS**

- Stream cutbank
- Drumlin (may be asymmetrical)
- Esker
- Ice-contact face. Solid line indicates prominent face; dashed line indicates subdued face. Barbs point up-glacier.
- Ice-marginal ridge. Solid line shows sharply crested ridges; dashed line shows subdued ridges. Barbs point in direction of ice-surface slope when the ridges formed.
- Rim ridge of ice-walled-lake plain.
- Direction of flow of meltwater stream (as indicated by modern surface slope)
- Geologic contact. Solid where position shown on map is judged to be generally within 0.1 km of actual position; dashed where the position shown may be more than 0.1 km from actual position.
- Precambrian or Paleozoic bedrock outcrop. Paleozoic rock is known to crop out only on Irma Hill.
- Crest of small, parallel ice-marginal ridge.

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.

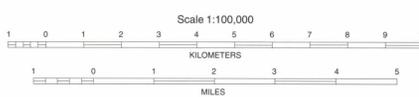
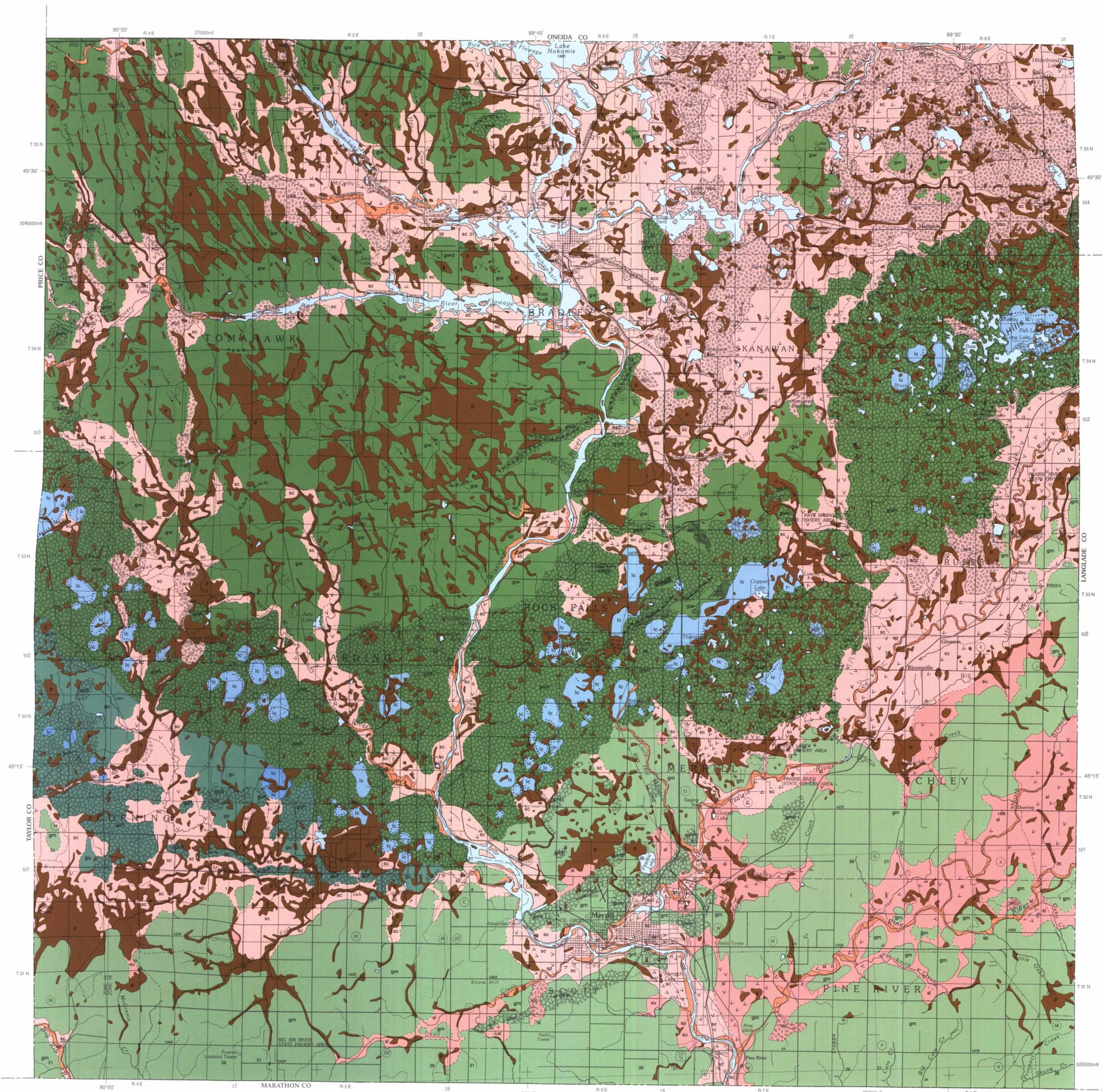


Plate 1. Geologic map of Lincoln County, Wisconsin.