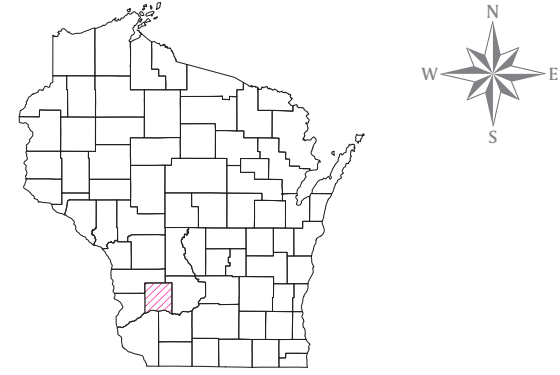


Wisconsin Geological and Natural History Survey
Preliminary Geology of Iowa County, Wisconsin
Plate 1

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EXPLANATION

Quaternary deposits

Wisconsin River lowlands in northern part of Iowa County. Deposits exceed 60 m in thickness and overlie undifferentiated Cambrian sandstone.

- Windblown sand.** Typically more than 1.5 m thick in dune areas; thinner windblown sand occurs over much of the surface of units ss and sj.
- Modern stream sediment.** Primarily sand or slightly gravelly sand on modern valley bottoms; most deposited during last part of the Holocene; overlain by thin peat and thin silty overbank sediment in many places; includes some premodern valley-side fans of fluvial and slope sediment.
- Stream sediment of Elderon Phase.** Sand and gravelly sand deposited by braided streams carrying meltwater from the Green Bay Lobe during the Elderon Phase of glaciation and by floodwater during drainage of glacial Lake Wisconsin; occurs on terraces below the Johnstown terraces.
- Younger premodern, nonglacial stream sediment.** Primarily sand or slightly gravelly sand; typically several meters thick; most deposited during early part of the Holocene or during the last part of the Wisconsin Glaciation; commonly occurs on fans or on flat terraces above modern floodplains; includes fans of hillslope sediment.
- Stream sediment of Johnstown Phase.** Sand and gravelly sand; deposited by braided streams that carried meltwater from the Green Bay Lobe during the Johnstown Phase of glaciation; occurs as a high terrace in the northeastern part of the county.

Paleozoic bedrock units

- Silurian dolomite.** Silicified dolomite of Silurian age. Thought to originate from alteration of limestone containing siliceous fossil shells by leaching and weathering. Only present under West Blue Mound in east-central Iowa County.
- Maquoketa Formation.** Blue-gray dolomitic shale with occasional thin gray dolomite layers. Only present under West Blue Mound in east-central Iowa County.
- Galena Formation (Sinnipee Group).** Drab yellowish-gray to brown dolomite and dolomitic limestone with some yellow-gray shale partings. Coarsely granular to crystalline, noticeably vuggy in outcrop. Medium to thick bedded. Laterally extensive chert beds in lower parts of the formation.
- Decorah Formation (Sinnipee Group).** Darkish gray and blue clayey limestone and olive-green to brown shale beds. Overall thin with some wavy bedding, about 10 m thick.
- Platteville Formation (Sinnipee Group).** Generally fine-grained light gray dolomite. Somewhat clayey becoming sandy near base. Upper part of formation generally thin and wavy bedded. Lower part of formation is browner in color and medium to thick bedded. Some parts are quite fossiliferous.
- Ancell Group (St. Peter Formation).** Basal Readstown Member is a mixture of sandstone, chert, shale, and dolomitic sandstone; thickness is extremely variable, from missing to more than 60 m thick. Overlain by Tonti Member, which is fine- to medium-grained well-sorted sandstone with occasional thin green shale layers. White, red, to yellow in color. Generally poorly cemented. Overlain by the Glenwood Member, a dolomitic, poorly sorted sandstone to sandy dolomite with thin dark green shale layers. Glenwood Member absent in some areas and generally less than 1.5 m thick. Ancell Group is deposited on major cratonic unconformity and ranges from 0 to over 100 m thick.
- Prairie du Chien Group (Shakopee and Onota Formations).** Light brown to yellow to light reddish-brown dolomite, sandy dolomite, and dolomitic sandstone. Commonly karstified with cavities often filled with dark brown to red silt and clay sediment. Local vuggy, oolitic, and cherty zones or irregular beds. Contact with overlying Ancell Group is very irregular.
- Jordan Formation.** White, brown, to red-brown; fine to coarse-grained quartz sandstone. Fine-grained parts of formation often hummocky to trough cross-stratified.
- St. Lawrence Formation.** Light yellow-brown fine-grained dolomitic sandstone, siltstone, and some thin shale beds. Generally thin-bedded.
- Tunnel City Formation.** Light brown to distinct glauconitic (green) fine-grained sandstone with green-gray shale partings. Commonly cross-stratified and extensively disturbed by burrowing organisms.
- Wonewoc Formation.** Light brown fine- to coarse-grained quartzose sandstone. Trough cross-stratification common. Contacts with overlying and underlying units are gradational.

SYMBOLS

- Geologic contacts; dashed where approximate.
- Stream-cut bank
- Ice-wedge polygon

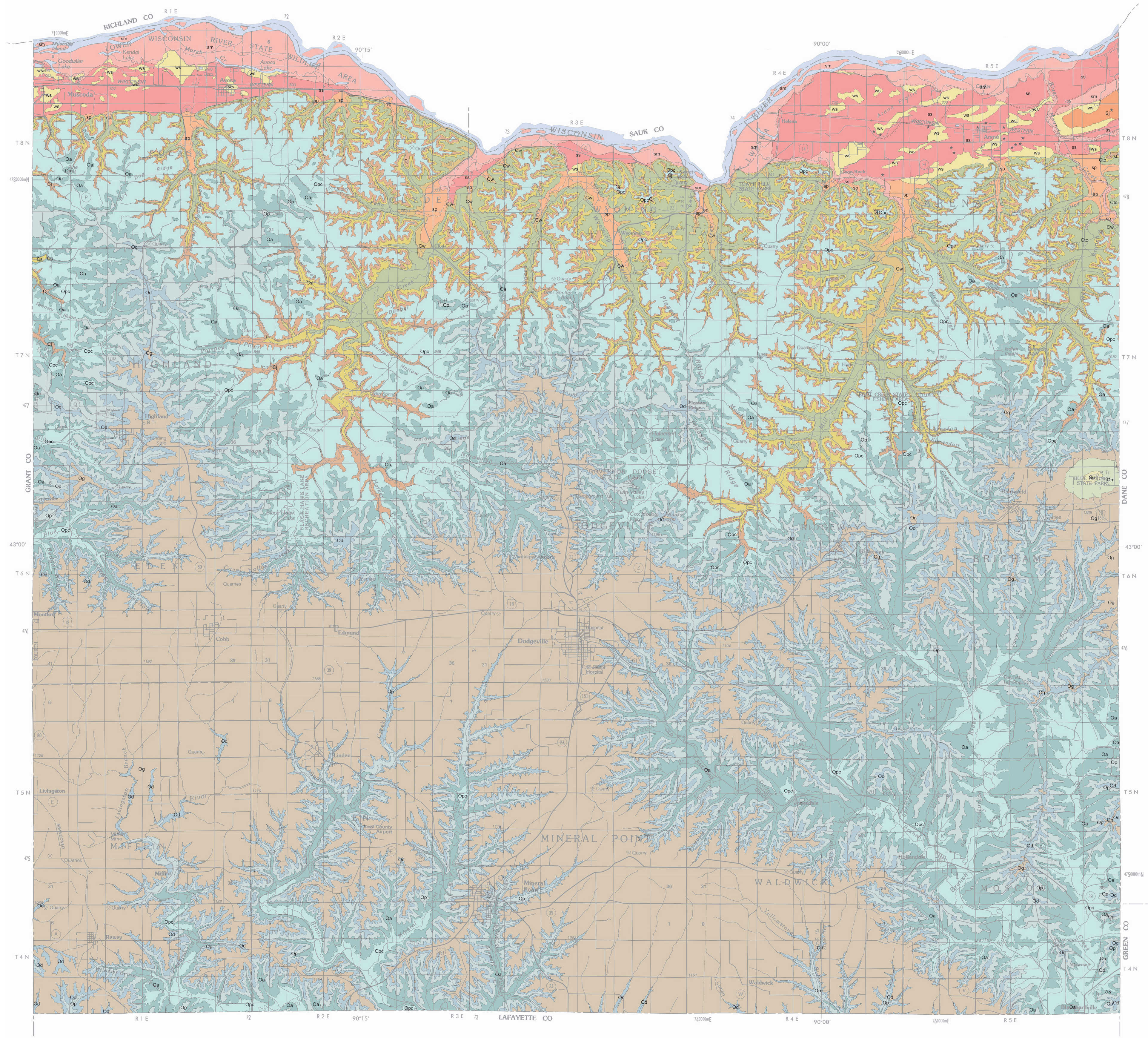
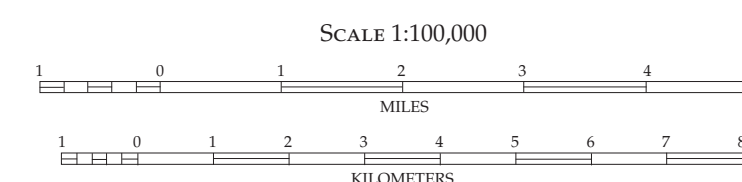


PLATE 1. PRELIMINARY GEOLOGIC MAP OF IOWA COUNTY, WISCONSIN.

The base map was constructed from U.S. Geological Survey digital line graphfiles (1990, scale 1:100,000) and modified by the Wisconsin Department of Natural Resources (1992) and the Wisconsin Geological and Natural History Survey (2007).



This map represents work performed by the Wisconsin Geological and Natural History Survey and is released to the open files in the interest of making the information readily available. This map has not been edited or reviewed for conformity with Wisconsin Geological and Natural History Survey standards and nomenclature.

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