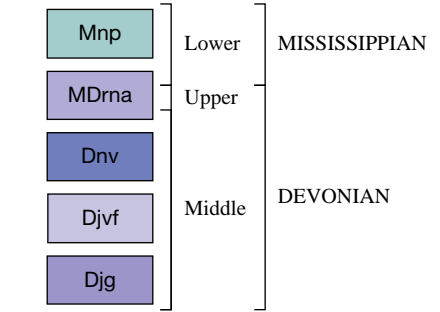


INTRODUCTION

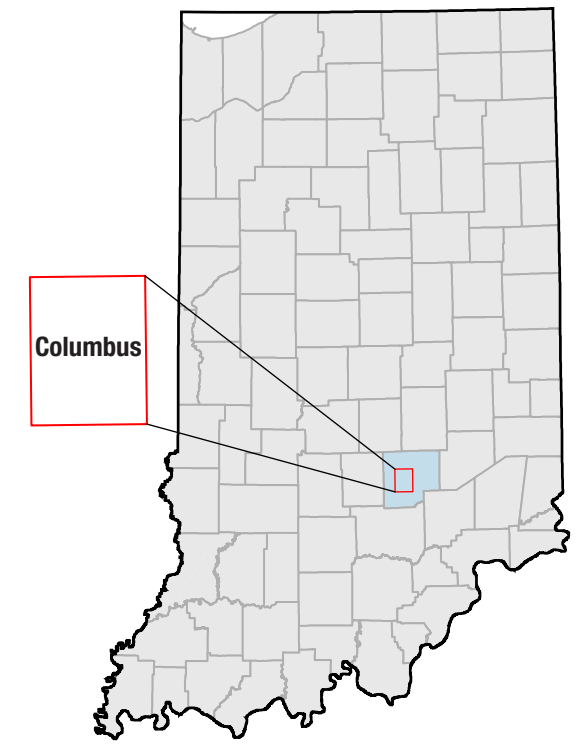
This preliminary geologic map of the Columbus 7.5-minute quadrangle is an interim geologic map product prepared to document progress accomplished during the second year of a three-year project to map bedrock geology in Bartholomew County, Indiana. The Columbus quadrangle is located near the center of the county (see index maps below) where all but the youngest and oldest rock units found in the county subcrop on a complex bedrock surface that underlies thick Quaternary unconsolidated sediments, mostly of glacial origin. The map shows Mississippian and Devonian sedimentary rock units that dip gently westward, subcropping in a deep, north-south-trending paleovalley and tributaries that join the main paleovalley from the east and west. Paleovalley fill locally exceeds 100 feet in thickness. Glacial deposits on the interfluvies are typically 30 to 50 feet thick.

CORRELATION OF MAP UNITS

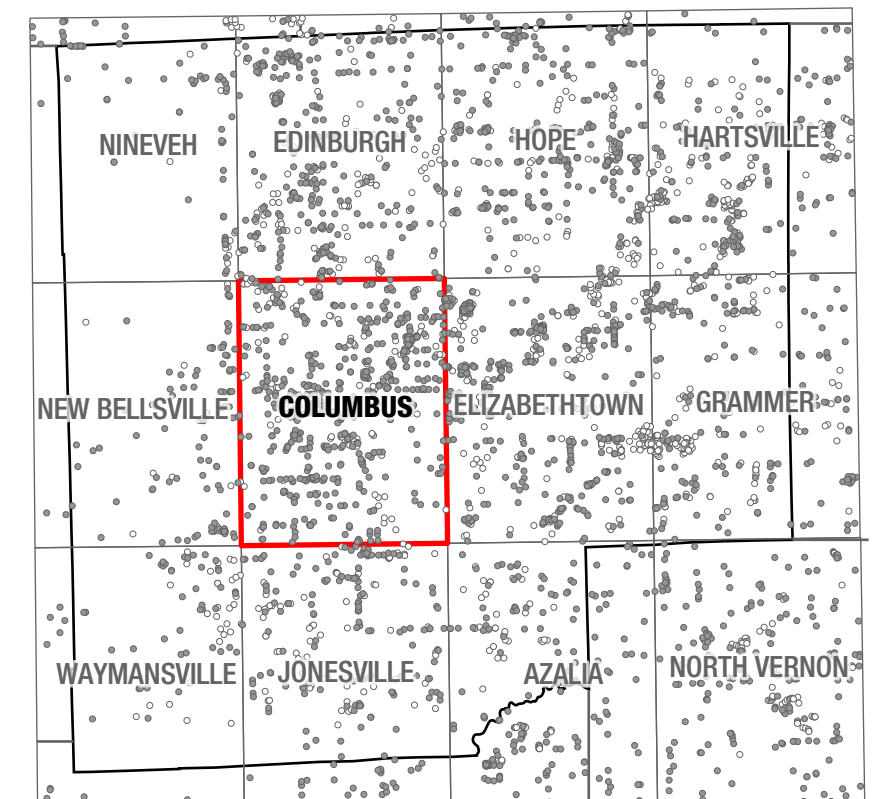


DESCRIPTION OF MAP UNITS

- Mnp** **New Providence Shale (Mississippian, Lower)**—Greenish-gray, blue-gray, dark-gray claystone is the dominant lithology. The New Providence is a relatively soft unit that underlies terrace deposits and low-relief hills in the western part of the map area. The New Providence does not crop out in the map area. Only the lower part of the New Providence is present in the map area.
- MDma** **Rockford Limestone and New Albany Shale undifferentiated (Mississippian, Lower and Devonian, Upper and Middle)**—The Rockford Limestone is a thin (less than 5 ft) marker bed that conformably overlies the New Albany Shale. The Rockford is a gray, fine-grained, argillaceous limestone. The New Albany Shale consists of dark brownish-gray to black carbonaceous shale, and greenish-gray shale.
- Dnv** **North Vernon Limestone (Devonian, Middle)**—Dark-gray fine- to coarse-grained pyritic bioclastic crinoidal limestone with greenish shale partings. Calcareous phosphatic pebbles up to an inch in diameter are conspicuous near the base of the unit. The unit ranges from less than 10 ft to slightly more than 20 ft thick in the map area.
- Djvf** **Jeffersonville Limestone (Devonian, Middle)**—**Vernon Fork Member**—Light-tan fine-grained sparsely fossiliferous limestone and light-gray to tan dolomitic laminated fine-grained locally brecciated limestone. Corals and stromatoporoids common near base of unit. Quartz sand grains and thin sandy intervals occur in middle part of unit. The Vernon Fork is approximately 25 to 40 ft thick in the map area.
- Dlg** **Geneva Dolomite Member (Devonian, Middle)**—Dark-brown to tan granular dolomite with calcite-filled corals and other fossil molds. Sparry calcite masses up to several inches in diameter are conspicuous throughout. The Geneva is approximately 25 to 35 ft thick in map area.
- Contact**—Identity and existence certain, location concealed.



Index map of Indiana showing the location of Bartholomew County and the Columbus 7.5-minute quadrangle.



Index map of Bartholomew County showing 7.5-minute quadrangle boundaries and the distribution of data collected during the first and second year of the Bartholomew County bedrock mapping project. Gray dots indicate data used to prepare this interim map and white dots indicate data that will be used after further analysis.

ACKNOWLEDGMENTS

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Digital cartography by Matthew R. Johnson

Basemap features digitized from the U.S. Geological Survey topographic quadrangle maps, scale 1:24,000 with updates from 2011 aerial photography. Contours and shading based on Indiana LIDAR data from 2011 compiled by M. R. Johnson. Projection: Universal Transverse Mercator (UTM), Zone 16N. Horizontal Datum: North American Datum of 1983 (NAD83).

Preliminary Bedrock Geologic Map of the Columbus 7.5-Minute Quadrangle, Indiana
 By
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 2012

