Illinois County Geologic Map ICGM Henry County-SG

QUATERNARY DEPOSITS

HUDSON EPISODE (~12,000 years before present (B.P.) to today)

Fill or removed earth; various sediment

Silt, sand, minor clay, and gravel; yellowish brown to dark gray or black; abundant

Cahokia Formation

Holocene alluvium and flood deposits in modern stream channels and floodplains; in organic matter in upper few feet; leached; generally less than 6 m (20 feet) thick

Surface mine, highly disturbed areas by human activity, usually coal mine

small valleys tributary to the Edwards,

Green, and Rock Rivers Cahokia Formation Alluvium and flood deposits deposits in Silt and fine sand; generally less than 6 m (abandoned channels) oxbows and abandoned channels

Fine sand and silt; generally less than 6 m Cahokia Formation Alluvium deposits in alluvial fans (alluvial fans)

Silt and fine sand; generally less than 6 m Cahokia Formation Alluvium and flood deposits in natural (leeves and bars) levee and bars

Fine sand and silt; generally less than 6 m Cahokia Formation Alluvium and flood deposits in point bars (20 feet) thick

WISCONSIN EPISODE (~60,000- ~12,000 years B.P.) Silt, sand, and clay; poorly sorted, yellowish Peyton Formation Slope wash deposits at the base of the

steep slopes (colluvium), sediments moved brown to gray; leached downslope by gravity; mapped only in the northwest along the Rock River valley Silt; yellowish brown; calcareous; upper few Peoria Silt Windblown loess

feet leached; generally less than 6 m (20 feet) thick **Silt**; yellowish brown to gray; calcareous except for upper 1 to 2 m (3 to 6 feet) in modern soil; may exceed 6 m (20 feet) in thickness; flat interfluves

Peoria overlaying Windblown loess Roxana Siĺt

less than 3 m (10 feet) thick; on valley sides with only one erosion surface terrace Silt, medium to very fine, and sand; generally less than 3 m (10 feet) thick

Silt, medium to very fine sand; generally

(Edwards facies) sand in some localities. Eolian in origin on valley sides with only one erosion surface Mostly Peoria Silt, with a mixture of eolian (Edwards facies 1) sand in some localities; on the highest of a series of terraces that constitute the erosion

Silt, medium to very fine, and sand; generally less than 3 m (10 feet) thick

Mostly Peoria Silt, with a mixture of eolian (Edwards facies 2) sand in some localities. Eolian in origin on the second highest of a series of terraces that constitute the erosion surface Mostly Peoria Silt, with a mixture of eolian

Mostly Peoria Silt, with a mixture of eolian

Silt, medium to very fine, and sand; generally less than 3 m (10 feet) thick Silt, medium to very fine, and sand;

generally less than 3 m (10 feet) thick

(Edwards facies 3) sand in some localities. Eolian in origin on the second lowest of a series of terraces that constitute the erosion surface Mostly Peoria Silt, with a mixture of eolian (Edwards facies 4) sand in some localities. Eolian in origin on

> the lowest of a series of terraces that constitute the erosion surface

massive; faintly laminated in places

Silt; clayey; yellowish brown to gray; leached; Carmi member, Lacustrine deposits from glacial Lake Equality Formation Milan

Henry Formation, Glaciofluvial outwash associated with the

Mackinaw member, Outwash, glaciofluvial deposits associated

Sand and fine gravel; yellowish brown; upper 3 m (10 feet) generally leached; thickness may exceed 15 m (50 feet) Sand and gravel; may exceed 30 m (100

Batavia member, **Outwash, glaciofluvial deposits** associated Henry Formation with the Wisconsin Episode

undifferentiated Wisconsin Episode

Sand and fine gravel; yellowish brown; upper 3 m (10 feet) generally leached Median to very fine sand; light yellowish

brown; leached medium to very fine sand

feet) in thickness

Henry Formation with the Wisconsin Episode Parkland sand, **Eolian sand**; either dunes or sand sheet; Henry Formation optically stimulated luminescence (OSL) dating indicates deposition from 17,000 to 18,000 years B.P., with some Holocene aged

ILLINOIS EPISODE (~200,000-~130,000 years B.P.) Sand and gravel; leached; small, discontinuous deposits

Pearl Formation Glaciofluvial outwash associated with the Illinois Episode

Pebbly, silty, clay; may exceed 15 m (50 feet) in thickness

Glasford Formation Glacial diamicton and associated deposits undifferentiated of the Illinois Episode

sand on the top

PRE-QUATERNARY DEPOSITS

Mudstone, siltstone, and shale; brown to

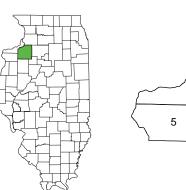
Dolomite; yellowish brown to gray

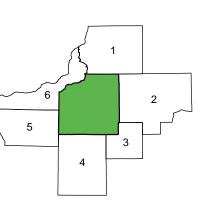
(5 feet) of Peoria Silt above it

Bedrock near the surface, with about 2 m (5 feet) of Peoria Silt above it, may contain thin coal and limestone. Bedrock near the surface, with about 2 m

Pit or quarry

OSL and/or radiocarbon age site See accompanying report for site data.





6 Rock Island

Geology based on field work by Richard C. Anderson, 1965–2000, and Xiaodong Miao, 2007–2010. Digital compilation of Richard C. Anderson's geology by Barbara J. Stiff and student interns. Cartography by Jane E. Johnshoy Domier and Dawn V. Heckmann. LiDAR hillshade by Donald E. Luman. Base map compiled by Illinois State Geological Survey from digital data (2009 TIGER/Line Shapefiles) provided by the United States Census Bureau. Hillshade from 2009 LiDAR elevation data provided by Illinois Height Modernization Program. Transverse Mercator Projection. North American Datum of 1983.

The Illinois State Geological Survey and the University of Illinois make no guarantee, expressed or implied, regarding the correctness of the interpretations presented in this document and accept no liability for the consequences of decisions made by others on the basis of the information presented here. The geologic interpretations are based on data that may vary with respect to accuracy of geographic location, the type and quantity of data available at each location, and the scientific and technical qualifications of the data sources. This map is not meant to be enlarged.

© 2011 University of Illinois Board of Trustees. All rights reserved. For permission information, contact the Illinois State Geological Survey.

Anderson, R.C., and X. Miao, 2011, Surficial Geology of Henry County, Illinois: Illinois State Geological Survey, Illinois County Geologic Map, ICGM Henry County-SG, 1:62,500, report, 4 p.