

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

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

Cahokia Formation Alluvium and flood deposits deposits in

(abandoned channels) oxbows and abandoned channels

organic matter in upper few feet; leached; generally less than 6 m (20 feet) thick

Silt and fine sand; generally less than 6 m

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 modern stream channels and floodplains; in small valleys tributary to the Edwards, Green, and Rock Rivers

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 Silt Silt, medium to very fine sand; generally Mostly Peoria Silt, with a mixture of eolian

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

(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

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

Mostly Peoria Silt, with a mixture of eolian (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

massive; faintly laminated in places

generally less than 3 m (10 feet) thick

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

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

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

feet) in thickness Sand and fine gravel; yellowish brown; upper 3 m (10 feet) generally leached

Sand and gravel; may exceed 30 m (100

Median to very fine sand; light yellowish

Pebbly, silty, clay; may exceed 15 m (50

Mackinaw member, Outwash, glaciofluvial deposits associated Henry Formation with the Wisconsin Episode Parkland sand, **Eolian sand**; either dunes or sand sheet;

Henry Formation with the Wisconsin Episode

brown; leached medium to very fine sand

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

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

PRE-QUATERNARY DEPOSITS

Mudstone, siltstone, and shale; brown to

Dolomite; yellowish brown to gray

feet) in thickness

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

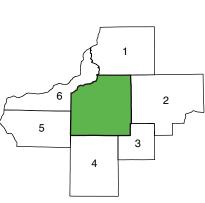
(5 feet) of Peoria Silt above it

Pit or quarry OSL and/or radiocarbon age site

See accompanying report for site data.



Illinois State Geological Survey.



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.

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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.