

# SOILS OF VINCENNES QUADRANGLE

## LAWRENCE COUNTY, ILLINOIS AND KNOX COUNTY, INDIANA

Department of Natural Resources  
ILLINOIS STATE GEOLOGICAL SURVEY  
William W. Shilts, Chief

Compiled by U.S. Department of Agriculture, Natural Resources Conservation Service  
and Illinois State Geological Survey  
2004

Illinois Preliminary Geologic Map  
IPGM Vincennes-S



Illinois	Indiana
3306 Allion silt clay loam, frequently flooded	AuB Ade loamy fine sand, 2 to 6% slopes
3308 Allion silt loam, 2 to 4% slopes	AB2 Allion silt loam, 2 to 6% slopes, eroded
308C2 Allion silt loam, 2 to 4% slopes	AC2 Allion silt loam, 6 to 12% slopes, eroded
308D3 Allion silt clay loam, 7 to 12% slopes, sev. eroded	AD3 Allion silt loam, 12 to 18% slopes, severely eroded
308E2 Allion silt clay loam, 12 to 18% slopes, sev. eroded	AcB Alvin fine sandy loam, 2 to 6% slopes
308E3 Allion silt clay loam, 12 to 18% slopes, sev. eroded	AcC Alvin fine sandy loam, 6 to 12% slopes
131C2 Alvin fine sandy loam, 4 to 7% slopes, eroded	AcD Alvin fine sandy loam, 12 to 18% slopes
131D2 Alvin fine sandy loam, 7 to 12% slopes, eroded	Ay Ayrshire fine sandy loam
131E2 Alvin fine sandy loam, 12 to 18% slopes, eroded	BB Bloomfield loamy fine sand, 2 to 10% slopes
131F2 Alvin fine sandy loam, 18 to 30% slopes, eroded	BD Bloomfield loamy fine sand, 12 to 18% slopes
8070 Beauport silt clay loam, occas. flooded-if drained	CHC Chelsea loamy fine sand, 4 to 10% slopes
53B Bloomfield fine sand, 2 to 4% slopes	CoA Conotton sandy loam, 0 to 3% slopes
53C Bloomfield fine sand, 4 to 7% slopes	ED Edwards Variant muck, drained
134B Camden silt loam, 2 to 4% slopes	ES Elston sandy loam, 0 to 3% slopes
134C Camden silt loam, 4 to 7% slopes	Ha Hammond silt loam, frequently flooded
134C2 Camden silt loam, 4 to 7% slopes, eroded	Hb Hammond silt loam, rarely flooded
286A Carmi sandy loam, 0 to 2% slopes	Hc Hammond Variant loamy sand, frequently flooded
286B Carmi sandy loam, 2 to 4% slopes	Kn Kings silt clay
286C Carmi sandy loam, 4 to 7% slopes	La Landas loamy sand
286C2 Carmi sandy loam, 4 to 7% slopes, eroded	Lo Lomax loam
8071 Darwin silt clay, occasionally flooded	Ly Lyles fine sandy loam
75A Drury silt loam, 0 to 2% slopes	Nd Noin silt clay loam, rarely flooded
75B Drury silt loam, 2 to 4% slopes	Pb Patton silt loam
327B Fox sandy loam, 2 to 4% slopes	Po Petrolia silt clay loam, frequently flooded
327B2 Fox sandy loam, 2 to 4% slopes, eroded	RSA Reesville silt loam, 0 to 2% slopes
8F2 Hickory loam, 18 to 30% slopes, eroded	Sa Selma loam
999F3 Hickory-Atford complex, 18 to 30% slopes, sev. eroded	Sc Selma clay loam
307A Iona silt loam, 0 to 2% slopes	SoA Stockland sandy loam, 0 to 2% slopes
307B Iona silt loam, 2 to 4% slopes	SyR2 Sylvan silt loam, 2 to 6% slopes, eroded
3304 Landes fine sandy loam, frequently flooded	SyC3 Sylvan silt loam, 6 to 12% slopes, severely eroded
175A Lamont fine sandy loam, 0 to 2% slopes	SyD3 Sylvan silt loam, 12 to 18% slopes, severely eroded
175B Lamont fine sandy loam, 2 to 4% slopes	SyF Sylvan silt loam, 25 to 40% slopes
175C Lamont fine sandy loam, 4 to 7% slopes	Ua Uskortsms, gently sloping
200 Ohio sandy loam, 0-2% slopes	Vn Vincennes loam
828B Petrolia silt clay loam, occas. flooded-if drained	Wa Wakefield silt loam, frequently flooded
74A Proctor silt loam, 0 to 2% slopes	Zp Zapp silt clay
74A2 Proctor silt loam, 0 to 2% slopes, eroded	Zf Zapp silt clay, frequently flooded
8092 Roby fine sandy loam, 0 to 2% slopes	borrow
80922 Sary sand, occasionally flooded	W Water - Rivers
8107 Sawmill silt clay loam, occasionally flooded	
8107A Sawmill silt clay loam, 0 to 2% slopes	
125 Selma loam	
88B Sparta loamy sand, 2 to 4% slopes	
88C Sparta loamy sand, 4 to 7% slopes	
155C2 Stockland loam, 4 to 7% slopes, eroded	
329A Tice silt clay loam, frequently flooded	
8083 Wabash silt clay, occasionally flooded	
83A Wabash silt clay, 0 to 2% slopes	
300 Westland clay loam	
885 Pts, gravel	

### Introduction

This map of the soils of the Vincennes 7.5 minute Quadrangle is a recomputed and reclassified update of part of the original soil surveys for Lawrence County, IL (Fehrenbacher and Odell 1956) and Knox County, IN (Kelly 1981). It was produced specifically for an Illinois State Geological Survey (ISGS) mapping project (Endres, 1997) under agreement with the U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS). The soils were updated using the 1988 soil legend for Lawrence County. Because this update affected only the soils on this map (both IL and IN side), we are publishing this map to make available the most recent interpretation of the soils on the quadrangle. In addition, this quadrangle straddles the IL-IN state boundary and this soil map would never be issued as a two-state map by the USDA-NRCS. The soil survey for Lawrence County is very old. A large number of soil series were found to be obsolete and were replaced with modern equivalents during the reclassification. Only a few minor changes were made to the Knox County soil survey.

### Using the Updated Soil Map

The USDA-NRCS provided the ISGS with a recomputed soil map and an updated list of the soil series. We digitized and entered into a GIS the individual soil polygons and developed a database that contained various attributes. Each soil series was assigned the same color even when the soil occurred in both Illinois and Indiana. This reduced the number of colors. The individual polygons are retained and labeled, however, so that the detailed information about soil slope and erosion class (e.g., 286C2) is available. Additional information associated with each soil series, such as engineering limitations, agricultural and wildlife capabilities, and soil texture and profile characteristics, can be obtained either from the individual county soil surveys or from local USDA-NRCS and county soil conservation offices.

Different soils develop due to various interacting factors. On this map, different soils have developed mainly due to differences in slope, drainage, and parent material (the geologic sediment in which the soil is developing). The soil series shown on this map can be grouped by many attributes to make other maps such as a parent material map. The parent materials then can be grouped by their texture and geologic origin to make a map of surficial geology (Quaternary geology).

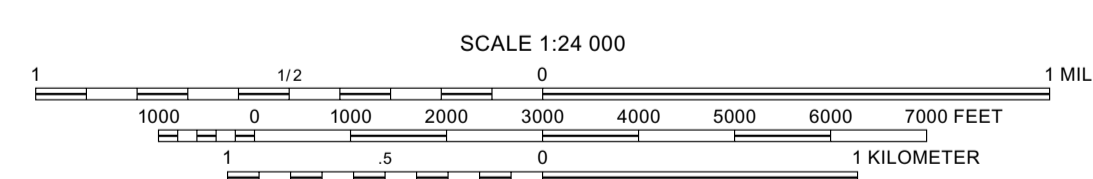
### References

- Endres, Toni, 1997, Recorrelation and update of soils on Vincennes Quadrangle. U.S. Department of Agriculture-Natural Resources Conservation Service, 2 p.
- Fehrenbacher, J. B. and R. T. Odell, 1956, Lawrence County soils. University of Illinois, Agricultural Experiment Station Soil Report 78, 91 p.
- Fehrenbacher, J. B., J. D. Alexander, I. J. Jansen, R. G. Darmody, R. A. Pope, M. A. Flock, E. E. Voss, J. W. Scott, W. F. Andrews, and L. J. Bushue, 1984, Soils of Illinois. University of Illinois at Urbana-Champaign College of Agriculture Agricultural Experiment Station and Soil Conservation Service, U. S. Department of Agriculture, Bulletin 778, 85 p.
- Kelly, Leo A., 1981, Soil survey of Knox County, Indiana. U.S. Department of Agriculture-Natural Resources Conservation Service, 158 p.

Base map compiled by Illinois State Geological Survey from data provided by the United States Geological Survey. Topography compiled from imagery dated 1958 and 1962 and planetable surveys 1961 and 1965. Planimetry derived from imagery taken 1987 and other sources. Photospectroscopy using imagery dated 1998.

North American Datum of 1983 (NAD 83)  
Projection: Transverse Mercator  
10,000-foot ticks: Illinois State Plane Coordinate system, east zone and Indiana State Plane Coordinate System, west zone (Transverse Mercator)  
1,000-meter grid: Universal Transverse Mercator grid ticks, zone 16

Recommended citation:  
U.S. Department of Agriculture, Natural Resources Conservation Service and Illinois State Geological Survey, 2004. Soils of Vincennes Quadrangle, Lawrence County, Illinois and Knox County, Indiana: Illinois State Geological Survey, Illinois Preliminary Geologic Map, IPGM-S Vincennes, 1:24,000.



BASE MAP CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Released by the authority of the State of Illinois: 2004

Based on a recomputation and reclassification by the U.S. Department of Agriculture, and digitizing and GIS development by the Illinois State Geological Survey.

Field checking, editing and text by M. Barnhardt, Illinois State Geological Survey.

Digital cartography by B. Stiff and J. McLeod, Illinois State Geological Survey.

This research was supported by the General Revenue Fund, State of Illinois.

This Illinois Preliminary Geologic Map (IPGM) is a lightly edited product, subject to less scientific and cartographic review than our Illinois Geologic Quadrangle (IGQ) series. It will not necessarily correspond to the format of IGQ series maps, or to those of other IPGM series maps. Whether or when this map will be upgraded depends on the resources and priorities of the ISGS.

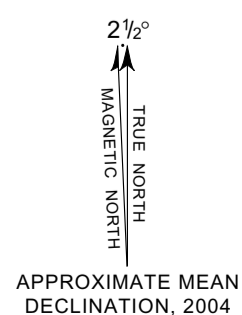
The Illinois State Geological Survey, the Illinois Department of Natural Resources, and the State of Illinois make no guarantee, expressed or implied, regarding the correctness of the interpretations presented in this document and accept no liability for the consequences of decisions made by others on 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/technical qualifications of the data sources. Maps or cross sections in this document are not meant to be enlarged.



For more information contact:  
Illinois State Geological Survey  
615 East Peabody Drive  
Champaign Illinois 61820-6964  
(217) 244-2414  
http://www.isgs.uiuc.edu

1	2	3
4	5	
6	7	8

ADJOINING QUADRANGLES  
1 Birds  
2 Russellville  
3 Oaktown  
4 Lawrenceville  
5 Fritchton  
6 Saint Francisville  
7 Decker  
8 Iona, IN



ROAD CLASSIFICATION	
Primary highway, hard surface	Light duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road

84 Interstate Route   
 20 U.S. Route   
 104 State Route