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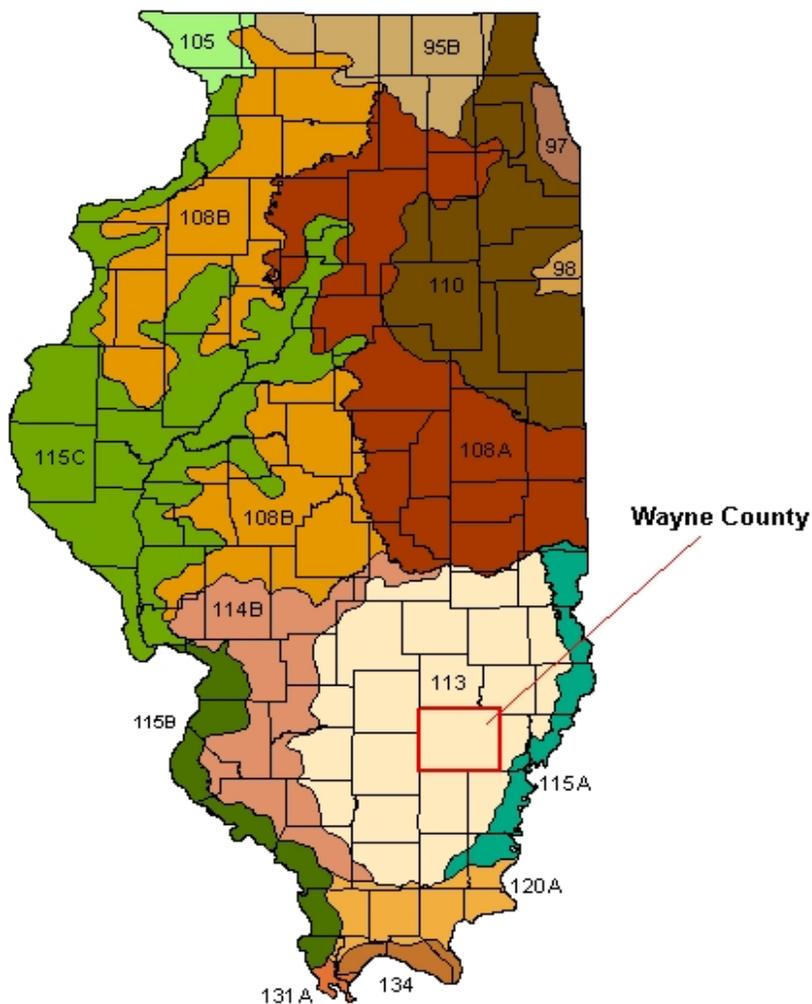
East Central Glaciated  
Regional MLRA  
Soil Survey Office  
Indianapolis, IN

# Classification and Correlation of Soils in Wayne County, Illinois

A Subset of MLRA 113  
November 2008

## Legend

- 95B-- Southern Wisconsin and Northern Illinois Drift Plain
- 97--Southwestern Michigan Fruit and Truck Crop Belt
- 98--Southern Michigan and Northern Indiana Drift Plain
- 105--Northern Mississippi Valley Loess Hills
- 108A--Illinois and Iowa Deep Loess and Drift, Eastern Part
- 108B--Illinois and Iowa Deep Loess and Drift, East-Central Part
- 110--Northern Illinois and Indiana Heavy Till Plain
- 113--Central Claypan Areas
- 114B--Southern Illinois and Indiana Thin Loess and Till Plain, Western Part
- 115A--Central Mississippi Valley Wooded Slopes, Eastern Part
- 115B--Central Mississippi Valley Wooded Slopes, Western Part
- 115C--Central Mississippi Valley Wooded Slopes, Northern Part
- 120A--Kentucky and Indiana Sandstone and Shale Hills and Valleys, Southern Part
- 131A--Southern Mississippi Valley Alluvium
- 134--Southern Mississippi Valley Loess



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**UNITED STATES DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE**

**CLASSIFICATION AND CORRELATION  
OF THE SOILS OF  
WAYNE COUNTY, ILLINOIS**

**A SUBSET OF MLRA 113**

**November 2008**

This correlation amendment was prepared by Troy Fehrenbacher, MLRA Soil Scientist, Charleston, IL, Chris Cochran, MLRA Soil Survey Project Leader, Charleston, IL, Ronald D. Collman, Soil Scientist, Champaign, IL, and Asghar A. Chowdhery, Soil Data Quality Specialist (SDQS) MLRA Region 11 team, Indianapolis, IN. It was prepared as part of the update of the Soil Survey of Wayne County, a subset of MLRA 113. It is based on transect data, pedon descriptions, laboratory data, field soil maps, join statements, and descriptive legend. Sources used in the literature review include "Classification and Correlation of the Soils of Wayne County, Illinois" – April, 1991, and the published "Soil Survey of Wayne County, Illinois" – August, 1996.

**HEADNOTE FOR DETAILED SOIL SURVEY LEGEND**

This update of Wayne County, Illinois is an update subset of the Soil Survey of Major Land Resource Area (MLRA) 113. Map unit names, the map unit symbols, and special and conventional symbols are consistent between subsets that are being updated. Map unit symbols consist of a combination of numbers and letters. The initial numbers represent the kind of soil. A capital letter following those numbers indicates the class of slope, except for the letter T which indicates a taxadjunct phase. A plus sign (+) following letters indicates an overwash phase. A final number of 2 following the slope letter indicates that the soil is moderately eroded, and a number 3 indicates that it is severely eroded. Absence of a number following the slope class indicates that the soil is slightly eroded or non-eroded. Map unit symbols without a following capital letter are for miscellaneous units.

**Soil Correlation Of  
Wayne County, Illinois: Detailed Soil Map Legend**

Field symbols	Field map unit name	Publication symbol	Approved map unit name
2 2A	Cisne silt loam Cisne silt loam, 0 to 2 percent slopes	2A	Cisne silt loam, 0 to 2 percent slopes
3A	Hoyleton silt loam, 0 to 2 percent slopes	3A	Hoyleton silt loam, 0 to 2 percent slopes
3B	Hoyleton silt loam, 2 to 5 percent slopes	3B	Hoyleton silt loam, 2 to 5 percent slopes
5C2	Blair silt loam, 5 to 10 percent slopes, eroded	5C2	Blair silt loam, 5 to 10 percent slopes, eroded
7C3	Atlas silty clay loam, 5 to 10 percent slopes, severely eroded	7C3	Atlas silty clay loam, 5 to 10 percent slopes, severely eroded
8D2	Hickory silt loam, 10 to 15 percent slopes, eroded	8D3	Hickory clay loam, 10 to 18 percent slopes, severely eroded
8D3	Hickory clay loam, 10 to 18 percent slopes, severely eroded		
8D3	Hickory silt loam, 10 to 15 percent slopes, severely eroded		
8E3	Hickory clay loam, 15 to 20 percent slopes, severely eroded		
8E 8E3 8F 8F	Hickory loam, 15 to 20 percent slopes Hickory clay loam, 15 to 20 percent slopes, severely eroded Hickory loam, 20 to 30 percent slopes Hickory silt loam, 18 to 35 percent slopes	8F	Hickory silt loam, 18 to 35 percent slopes
10C 14C3	Plumfield silty clay loam, 5 to 10 percent slopes Ava silty clay loam, 5 to 10 percent slopes, severely eroded	10C	Plumfield silty clay loam, 5 to 10 percent slopes
12 12A	Wynoose silt loam Wynoose silt loam, 0 to 2 percent slopes	12A	Wynoose silt loam, 0 to 2 percent slopes
13A	Bluford silt loam, 0 to 2 percent slopes	13A	Bluford silt loam, 0 to 2 percent slopes
13B	Bluford silt loam, 2 to 5 percent slopes	13B	Bluford silt loam, 2 to 5 percent slopes
13B2	Bluford silt loam, 2 to 5 percent slopes, eroded	13B2	Bluford silt loam, 2 to 5 percent slopes, eroded
14B	Ava silt loam, 2 to 5 percent slopes	14B	Ava silt loam, 2 to 5 percent slopes
14B2	Ava silt loam, 2 to 5 percent slopes, eroded	14B2	Ava silt loam, 2 to 5 percent slopes, eroded

Soil Correlation Legend of Wayne County, Illinois:  
Detailed Soil Map Legend (Continued)

Field symbols	Field map unit name	Publication symbol	Approved map unit name
14C2	Ava silt loam, 5 to 10 percent slopes, eroded	14C2	Ava silt loam, 5 to 10 percent slopes, eroded
15B 15B2	Parke silt loam, 2 to 5 percent slopes Parke silt loam, 2 to 5 percent slopes, eroded	15B2	Parke silt loam, 2 to 5 percent slopes, eroded
15C2	Parke silt loam, 5 to 10 percent slopes, eroded	15C2	Parke silt loam, 5 to 10 percent slopes, eroded
109 109A	Raccoon silt loam Raccoon silt loam, 0 to 2 percent slopes	109A	Raccoon silt loam, 0 to 2 percent slopes
301B	Grantsburg silt loam, 2 to 5 percent slopes	301B	Grantsburg silt loam, 2 to 5 percent slopes
337 337A	Creal silt loam Creal silt loam, 0 to 2 percent slopes	337A	Creal silt loam, 0 to 2 percent slopes
340C2 340C3	Zanesville silt loam, 5 to 10 percent slopes, eroded Zanesville silt loam, 5 to 10 percent slopes, severely eroded	340C2	Zanesville silt loam, 5 to 10 percent slopes, eroded
340D2 340D2 340D3	Zanesville silt loam, 10 to 15 percent slopes, eroded Zanesville silt loam, 10 to 18 percent slopes, eroded Zanesville silt loam, 10 to 15 percent slopes, severely eroded	340D2	Zanesville silt loam, 10 to 18 percent slopes, eroded
340D3 340D3	Zanesville silty clay loam, 10 to 18 percent slopes, severely eroded Zanesville silt loam, 10 to 15 percent slopes, severely eroded	340D3	Zanesville silty clay loam, 10 to 18 percent slopes, severely eroded
585D2 585D3	Negley silt loam, 10 to 18 percent slopes, eroded Negley silt loam, 10 to 15 percent slopes, severely eroded	585D2	Negley silt loam, 10 to 18 percent slopes, eroded
585F 585F	Negley loam, 18 to 35 percent slopes Negley loam, 20 to 45 percent slopes	585F	Negley loam, 18 to 35 percent slopes
5C3 652C2	Blair silt loam, 5 to 10 percent slopes, severely eroded Passport silt loam, 5 to 10 percent slopes, eroded	652C2	Passport silt loam, 5 to 10 percent slopes, eroded

Soil Correlation Legend of Wayne County, Illinois:  
Detailed Soil Map Legend (Continued)

Field symbols	Field map unit name	Publication symbol	Approved map unit name
786E	Frondorf silt loam, 15 to 20 percent slopes	908D2	Hickory-Kell silt loams, 10 to 18 percent slopes, eroded
908D2	Hickory-Kell silt loams, 10 to 18 percent slopes, eroded		
8E	Hickory loam, 15 to 20 percent slopes	908F	Hickory-Kell silt loams, 18 to 35 percent slopes
786F	Frondorf silt loam, 20 to 30 percent slopes		
908F	Hickory-Kell silt loams, 18 to 35 percent slopes		
8D2	Hickory silt loam, 10 to 15 percent slopes, eroded	947D2	Hickory-Passport silt loams, 10 to 18 percent slopes, eroded
8E	Hickory loam, 15 to 20 percent slopes		
947D2	Hickory-Passport silt loams, 10 to 18 percent slopes, eroded		
8D3	Hickory silt loam, 10 to 15 percent slopes, severely eroded	947D3	Hickory-Passport clay loams, 10 to 18 percent slopes, severely eroded
8E3	Hickory clay loam, 15 to 20 percent slopes, severely eroded		
947D3	Hickory-Passport clay loams, 10 to 18 percent slopes, severely eroded		
1108	Bonnie silt loam, wet	1108T	Bonnie silt loam, sodic, undrained, 0 to 2 percent slopes, frequently flooded
1108T	Bonnie silt loam, undrained, 0 to 2 percent slopes, frequently flooded		
1524	Zipp silty clay loam, wet	1524A	Zipp silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded
1524A	Zipp silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded		
3072	Sharon silt loam, frequently flooded	3072A	Sharon silt loam, 0 to 2 percent slopes, frequently flooded
3072A	Sharon silt loam, 0 to 2 percent slopes, frequently flooded		
3108	Bonnie silt loam, frequently flooded	3108A	Bonnie silt loam, 0 to 2 percent slopes, frequently flooded
3108A	Bonnie silt loam, 0 to 2 percent slopes, frequently flooded		
7108	Bonnie silt loam, rarely flooded		
3108	Bonnie silt loam, frequently flooded	3108T	Bonnie silt loam, sodic, 0 to 2 percent slopes, frequently flooded
3108T	Bonnie silt loam, 0 to 2 percent slopes, frequently flooded		
7108	Bonnie silt loam, rarely flooded		

Soil Correlation Legend of Wayne County, Illinois:  
Detailed Soil Map Legend (Continued)

Field symbols	Field map unit name	Publication symbol	Approved map unit name
3208	Sexton silt loam, frequently flooded	3208A	Sexton silt loam, 0 to 2 percent slopes, frequently flooded
3208A	Sexton silt loam, 0 to 2 percent slopes, frequently flooded		
3231	Evansville silt loam, frequently flooded	3231A	Evansville silt loam, 0 to 2 percent slopes, frequently flooded
3231A	Evansville silt loam, 0 to 2 percent slopes, frequently flooded		
3288	Petrolia silty clay loam, frequently flooded		
7288	Petrolia silty clay loam, rarely flooded		
3382	Belknap silt loam, frequently flooded	3382A	Belknap silt loam, 0 to 2 percent slopes, frequently flooded
3382A	Belknap silt loam, 0 to 2 percent slopes, frequently flooded		
3420	Piopolis silty clay loam, frequently flooded	3420A	Piopolis silty clay loam, 0 to 2 percent slopes, frequently flooded
3420A	Piopolis silty clay loam, 0 to 2 percent slopes, frequently flooded		
7420	Piopolis silty clay loam, rarely flooded		
3422	Cape silty clay loam, frequently flooded	3422A	Cape silty clay loam, 0 to 2 percent slopes, frequently flooded
3422A	Cape silty clay loam, 0 to 2 percent slopes, frequently flooded		
3142	Patton silty clay loam, frequently flooded	3468A	Lakaskia silt loam, 0 to 2 percent slopes, frequently flooded
3468A	Lakaskia silt loam, 0 to 2 percent slopes, frequently flooded		
3482C	Uniontown silt loam, frequently flooded, 4 to 10 percent slopes, eroded	3482C2	Uniontown silt loam, 5 to 10 percent slopes, frequently flooded, eroded
3482C2	Uniontown silt loam, 5 to 10 percent slopes, frequently flooded, eroded		
3483	Henshaw silt loam, frequently flooded	3483A	Henshaw silt loam, 0 to 2 percent slopes, frequently flooded
3483A	Henshaw silt loam, 0 to 2 percent slopes, frequently flooded		
3524	Zipp silty clay, frequently flooded	3524A	Zipp silty clay, 0 to 2 percent slopes, frequently flooded
3524A	Zipp silty clay, 0 to 2 percent slopes, frequently flooded		

Soil Correlation Legend of Wayne County, Illinois:  
Detailed Soil Map Legend (Continued)

Field symbols	Field map unit name	Publication symbol	Approved map unit name
3524+	Zipp silt loam, overwash, frequently flooded	3524A+	Zipp silt loam, overwash, 0 to 2 percent slopes, frequently flooded
3524A+	Zipp silt loam, overwash, 0 to 2 percent slopes, frequently flooded		
3787	Banlic silt loam, frequently flooded	3787A	Banlic silt loam, 0 to 2 percent slopes, frequently flooded
3787A	Banlic silt loam, 0 to 2 percent slopes, frequently flooded		
109	Racoon silt loam	7109A	Racoon silt loam, 0 to 2 percent slopes, rarely flooded
7109A	Racoon silt loam, 0 to 2 percent slopes, rarely flooded		
337	Creal silt loam	7337A	Creal silt loam, 0 to 2 percent slopes, rarely flooded
7337A	Creal silt loam, 0 to 2 percent slopes, rarely flooded		
432	Geff silt loam	7432A	Geff silt loam, 0 to 2 percent slopes, rarely flooded
7432A	Geff silt loam, 0 to 2 percent slopes, rarely flooded		
434B	Ridgway silt loam, 2 to 5 percent slopes	7434B	Ridgway silt loam, 2 to 5 percent slopes, rarely flooded
7434B	Ridgway silt loam, 2 to 5 percent slopes, rarely flooded		
8382	Belknap silt loam, occasionally flooded	8382A	Belknap silt loam, 0 to 2 percent slopes, occasionally flooded
8382A	Belknap silt loam, 0 to 2 percent slopes, occasionally flooded		
8787	Banlic silt loam, occasionally flooded	8787A	Banlic silt loam, 0 to 2 percent slopes, occasionally flooded
8787A	Banlic silt loam, 0 to 2 percent slopes, occasionally flooded		
M-W W	Miscellaneous Water Water	M-W	Miscellaneous Water
W	Water	W	Water

**Series established by this correlation:** None

**Series or components added to the previous correlated legend (April 1991):** Lakaskia, Kell, Miscellaneous Water, Passport, Plumfield

**Series dropped from the previously correlated legend (April 1991):** Frondorf, Patton, Petrolia

**Series Made Inactive:** None

**Verification of exact cooperator names:** For the front cover and half-title page:

United States Department of Agriculture  
Natural Resources Conservation Service  
in Cooperation with  
Illinois Agricultural Experiment Station

The cooperators to be listed on the inside of the front cover are the same as those on the front cover, and in addition state: "This soil survey update is part of the technical assistance provided to Wayne County Soil and Water Conservation District. Financial assistance was made available by the Wayne County Board and the Illinois Department of Agriculture."

The last soil survey of Wayne County was completed in 1988 and was published by the United States Department of Agriculture, Natural Resources Conservation Service in 1996. It is Illinois Agricultural Experiment Station Soil Report No. 148, "Soil Survey of Wayne County, Illinois". Reference to the prior soil survey will be included in the literature citation of the manuscript. This update replaces the 1996 soil survey and provides additional data, updated soil interpretations, and digital soil maps at a 1:12,000 scale on an orthophoto base.

**Join Statement:** Wayne County, which was published in 1996, joins seven modern soil surveys. These are Clay, Richland, Edwards, White, Hamilton, Jefferson, and Marion Counties in Illinois. Clay County to the northwest was published in 1998. Richland County to the northeast and Edwards County to the east was a joint survey and was published in 1972. White County to the southeast was updated and SSURGO certified in 2006 and a digital publication is currently under review. Hamilton County to the southwest was published in 1986. Jefferson County to the southwest was updated and SSURGO certified in 2006 and a digital publication is currently under review. Marion County to the northwest was published in 1996 and an update is currently underway. An acceptable join exists with all adjoining counties. An exact join will be completed with these counties when they are updated to the MLRA legend.

**Disposition of field sheets:** The publication soil map materials used for Soil Report No. 148 were scanned then orthorectified using OrthoMapper software to match orthophoto quarter quads at a scale of 1:12,000. The quarter quads were vectorized and labeled in ArcInfo, and delivered to the Kansas Digitizing Center. The final SSURGO certified product will be available at the Soil Datamart, the NRCS state office, and will be provided to the Wayne County Board as part of the cost share cooperative agreement.

**Instructions for map compilation and map finishing:** The digital maps and supporting documentation will be delivered to the Kansas Digitizing Center. The Charleston MLRA team and GIS staff at the state office will complete a final check before SSURGO certification.

**Conventional and special symbols legend:** Only those symbols indicated on the attached NRCS-SOILS-37A will be shown on the legend and placed on the maps.

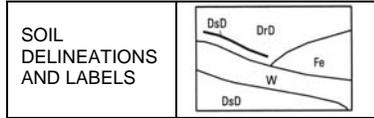
**FEATURE AND SYMBOL LEGEND  
 FOR SOIL SURVEY**

Soil Survey Area: Wayne County

State: Illinois

Date: September, 2008

**SOIL SURVEY FEATURES**



**STANDARD LANDFORM AND MISCELLANEOUS SURFACE FEATURES**

Bedrock escarpment	YAYAYAYAYAYAYAY
Short steep slope	.....
Gravel pit	X
Levee	
Rock outcrop	▼
Sandy spot	X
Severely eroded spot	≡
Sodic spot	∅
Wet spot	ψ

**AD HOC FEATURES**

OBS	15	X
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**CULTURAL FEATURES  
 (Optional)**

National, state or providence	— — — —
County or parish	- - - -
Reservation (national or state forest or park)	— — — —
Field sheet matchline and neatline	— — — —
Public Land Survey System Section Corner Tics.	L T

**TRANSPORTATION: NONE**

**ROAD EMBLEMS**

Interstate	
Federal	
State	

**LOCATED OBJECTS: NONE**

**HYDROGRAPHIC FEATURES  
 (Optional): NONE**

**DEFINITIONS AND GUIDELINES  
FOR USE OF CONVENTIONAL AND SPECIAL SYMBOLS  
FOR WAYNE COUNTY, ILLINOIS**

<b>LABEL</b>	<b>NAME</b>	<b>DESCRIPTION OF FEATURE</b>
ERO	Severely eroded spot	An area where on the average 75 percent or more of the original surface layer has been lost because of accelerated erosion. Not used in map units that are named eroded, severely eroded, or gullied. Typically ¼ to 1 acres.
ESB	Escarpment, bedrock	A relatively continuous and steep slope or cliff, which was produced by erosion or faulting, that breaks the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock.
GPI	Gravel pit	An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel. Typically ½ to 3 acres.
LVS	Levee	An embankment that confines or controls water, especially one built along the banks of a river to prevent overflow of lowlands.
OBS	Oil brine spot	An area where the surface layer has oil and/or brine accumulation in a quantity sufficient to inhibit vegetative growth. Typically ¼ to ½ acre.
ROC	Rock outcrop	An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock or where "Rock outcrop" is a named component of the map unit. Typically ¼ to ½ acres.
SAN	Sandy spot	A spot where the surface layer is loamy fine sand or coarser in areas where the surface layer of the named soils in the surrounding map unit is very fine sandy loam or finer. Typically ½ to 2 acres.
SLP	Short, steep slope	Narrow soil area that has slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.
SOD	Sodic spot	An area where the surface layer has a sodium adsorption ratio that is at least 10 more than the surface layer of the named soils in the surrounding map unit which have a sodium adsorption ratio of 5 or less. Typically ½ to 2 acres.
WET	Wet spot	A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils in the surrounding map unit. Typically ½ to 2 acres.

**Soil Map Unit Symbol Conversion Legend  
Wayne County, Illinois**

Field symbols	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
2	2A	109A	109A	3142	3468A
2A	2A	301B	301B	3208	3208A
3A	3A	337	337A	3208A	3208A
3B	3B	337	7337A	3231	3231A
5C2	5C2	337A	337A	3231A	3231A
5C3	652C2	340C2	340C2	3288	3231A
7C3	7C3	340C3	340C2	3382	3382A
8D2	8D3	340D2	340D2	3382A	3382A
8D2	947D2	340D2	340D2	3420	3420A
8D3	8D3	340D3	340D2	3420A	3420A
8D3	8D3	340D3	340D3	3422	3422A
8D3	947D3	340D3	340D3	3422A	3422A
8E	8F	432	7432A	3468A	3468A
8E	908F	434B	7434B	3482C	3482C2
8E	947D2	585D2	585D2	3482C2	3482C2
8E3	8D3	585D3	585D2	3483	3483A
8E3	8F	585F	585F	3483A	3483A
8E3	947D3	585F	585F	3524	3524A
8F	8F	652C2	652C2	3524+	3524A+
8F	8F	786E	908D2	3524A	3524A
10C	10C	786F	908F	3524A+	3524A+
12	12A	908D2	908D2	3787	3787A
12A	12A	908F	908F	3787A	3787A
13A	13A	947D2	947D2	7108	3108A
13B	13B	947D3	947D3	7108	3108T
13B2	13B2	1108	1108T	7109A	7109A
14B	14B	1108T	1108T	7288	3231A
14B2	14B2	1524	1524A	7337A	7337A
14C2	14C2	1524A	1524A	7420	3420A
14C3	10C	3072	3072A	7432A	7432A
15B	15B2	3072A	3072A	7434B	7434B
15B2	15B2	3108	3108A	8382	8382A
15C2	15C2	3108	3108T	8382A	8382A
109	109A	3108A	3108A	8787	8787A
109	7109A	3108T	3108T	8787A	8787A
				M-W	M-W
				W	M-W
				W	W

## Soil Identification Legend According to Alphabetical Sequence

Map symbol	Approved Map Unit Name
7C3	Atlas silty clay loam, 5 to 10 percent slopes, severely eroded
14B	Ava silt loam, 2 to 5 percent slopes
14B2	Ava silt loam, 2 to 5 percent slopes, eroded
14C2	Ava silt loam, 5 to 10 percent slopes, eroded
3787A	Banlic silt loam, 0 to 2 percent slopes, frequently flooded
8787A	Banlic silt loam, 0 to 2 percent slopes, occasionally flooded
3382A	Belknap silt loam, 0 to 2 percent slopes, frequently flooded
8382A	Belknap silt loam, 0 to 2 percent slopes, occasionally flooded
5C2	Blair silt loam, 5 to 10 percent slopes, eroded
13A	Bluford silt loam, 0 to 2 percent slopes
13B	Bluford silt loam, 2 to 5 percent slopes
13B2	Bluford silt loam, 2 to 5 percent slopes, eroded
3108A	Bonnie silt loam, 0 to 2 percent slopes, frequently flooded
3108T	Bonnie silt loam, sodic, 0 to 2 percent slopes, frequently flooded
1108T	Bonnie silt loam, sodic, undrained, 0 to 2 percent slopes, frequently flooded
3422A	Cape silty clay loam, 0 to 2 percent slopes, frequently flooded
2A	Cisne silt loam, 0 to 2 percent slopes
337A	Creal silt loam, 0 to 2 percent slopes
7337A	Creal silt loam, 0 to 2 percent slopes, rarely flooded
3231A	Evansville silt loam, 0 to 2 percent slopes, frequently flooded
7432A	Geff silt loam, 0 to 2 percent slopes, rarely flooded
301B	Grantsburg silt loam, 2 to 5 percent slopes
3483A	Henshaw silt loam, 0 to 2 percent slopes, frequently flooded
8D3	Hickory clay loam, 10 to 18 percent slopes, severely eroded
8F	Hickory silt loam, 18 to 35 percent slopes
908D2	Hickory-Kell silt loams, 10 to 18 percent slopes, eroded
908F	Hickory-Kell silt loams, 18 to 35 percent slopes
947D3	Hickory-Passport clay loams, 10 to 18 percent slopes, severely eroded
947D2	Hickory-Passport silt loams, 10 to 18 percent slopes, eroded
3A	Hoyleton silt loam, 0 to 2 percent slopes
3B	Hoyleton silt loam, 2 to 5 percent slopes
3468A	Lakaskia silt loam, 0 to 2 percent slopes, frequently flooded
M-W	Miscellaneous Water
585F	Negley loam, 18 to 35 percent slopes
585D2	Negley silt loam, 10 to 18 percent slopes, eroded
15B2	Parke silt loam, 2 to 5 percent slopes, eroded
15C2	Parke silt loam, 5 to 10 percent slopes, eroded
652C2	Passport silt loam, 5 to 10 percent slopes, eroded
3420A	Piopolis silty clay loam, 0 to 2 percent slopes, frequently flooded
10C	Plumfield silty clay loam, 5 to 10 percent slopes
109A	Racoon silt loam, 0 to 2 percent slopes
7109A	Racoon silt loam, 0 to 2 percent slopes, rarely flooded
7434B	Ridgway silt loam, 2 to 5 percent slopes, rarely flooded
3208A	Sexton silt loam, 0 to 2 percent slopes, frequently flooded
3072A	Sharon silt loam, 0 to 2 percent slopes, frequently flooded
3482C2	Uniontown silt loam, 5 to 10 percent slopes, frequently flooded, eroded

Map symbol	Approved Map Unit Name
W	Water
12A	Wynoose silt loam, 0 to 2 percent slopes
340D2	Zanesville silt loam, 10 to 18 percent slopes, eroded
340C2	Zanesville silt loam, 5 to 10 percent slopes, eroded
340D3	Zanesville silty clay loam, 10 to 18 percent slopes, severely eroded
3524A+	Zipp silt loam, overwash, 0 to 2 percent slopes, frequently flooded
1524A	Zipp silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded
3524A	Zipp silty clay, 0 to 2 percent slopes, frequently flooded

## Soil Identification Legend According to Numerical Sequence

Map symbol	Approved Map Unit Name
2A	Cisne silt loam, 0 to 2 percent slopes
3A	Hoyleton silt loam, 0 to 2 percent slopes
3B	Hoyleton silt loam, 2 to 5 percent slopes
5C2	Blair silt loam, 5 to 10 percent slopes, eroded
7C3	Atlas silty clay loam, 5 to 10 percent slopes, severely eroded
8D3	Hickory clay loam, 10 to 18 percent slopes, severely eroded
8F	Hickory silt loam, 18 to 35 percent slopes
10C	Plumfield silty clay loam, 5 to 10 percent slopes
12A	Wynoose silt loam, 0 to 2 percent slopes
13A	Bluford silt loam, 0 to 2 percent slopes
13B	Bluford silt loam, 2 to 5 percent slopes
13B2	Bluford silt loam, 2 to 5 percent slopes, eroded
14B	Ava silt loam, 2 to 5 percent slopes
14B2	Ava silt loam, 2 to 5 percent slopes, eroded
14C2	Ava silt loam, 5 to 10 percent slopes, eroded
15B2	Parke silt loam, 2 to 5 percent slopes, eroded
15C2	Parke silt loam, 5 to 10 percent slopes, eroded
109A	Racoon silt loam, 0 to 2 percent slopes
301B	Grantsburg silt loam, 2 to 5 percent slopes
337A	Creal silt loam, 0 to 2 percent slopes
340C2	Zanesville silt loam, 5 to 10 percent slopes, eroded
340D2	Zanesville silt loam, 10 to 18 percent slopes, eroded
340D3	Zanesville silty clay loam, 10 to 18 percent slopes, severely eroded
585D2	Negley silt loam, 10 to 18 percent slopes, eroded
585F	Negley loam, 18 to 35 percent slopes
652C2	Passport silt loam, 5 to 10 percent slopes, eroded
908D2	Hickory-Kell silt loams, 10 to 18 percent slopes, eroded
908F	Hickory-Kell silt loams, 18 to 35 percent slopes
947D2	Hickory-Passport silt loams, 10 to 18 percent slopes, eroded
947D3	Hickory-Passport clay loams, 10 to 18 percent slopes, severely eroded
1108T	Bonnie silt loam, sodic, undrained, 0 to 2 percent slopes, frequently flooded
1524A	Zipp silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded
3072A	Sharon silt loam, 0 to 2 percent slopes, frequently flooded
3108A	Bonnie silt loam, 0 to 2 percent slopes, frequently flooded
3108T	Bonnie silt loam, sodic, 0 to 2 percent slopes, frequently flooded
3208A	Sexton silt loam, 0 to 2 percent slopes, frequently flooded
3231A	Evansville silt loam, 0 to 2 percent slopes, frequently flooded
3382A	Belknap silt loam, 0 to 2 percent slopes, frequently flooded
3420A	Piopolis silty clay loam, 0 to 2 percent slopes, frequently flooded
3422A	Cape silty clay loam, 0 to 2 percent slopes, frequently flooded
3468A	Lakaskia silt loam, 0 to 2 percent slopes, frequently flooded
3482C2	Uniontown silt loam, 5 to 10 percent slopes, frequently flooded, eroded
3483A	Henshaw silt loam, 0 to 2 percent slopes, frequently flooded
3524A	Zipp silty clay, 0 to 2 percent slopes, frequently flooded
3524A+	Zipp silt loam, overwash, 0 to 2 percent slopes, frequently flooded

3787A	Banlic silt loam, 0 to 2 percent slopes, frequently flooded
Map symbol	Approved Map Unit Name
7109A	Racoon silt loam, 0 to 2 percent slopes, rarely flooded
7337A	Creal silt loam, 0 to 2 percent slopes, rarely flooded
7432A	Geff silt loam, 0 to 2 percent slopes, rarely flooded
7434B	Ridgway silt loam, 2 to 5 percent slopes, rarely flooded
8382A	Belknap silt loam, 0 to 2 percent slopes, occasionally flooded
8787A	Banlic silt loam, 0 to 2 percent slopes, occasionally flooded
M-W	Miscellaneous Water
W	Water

**CLASSIFICATION OF PEDONS  
SAMPLED FOR LABORATORY ANALYSIS  
WAYNE COUNTY, ILLINOIS  
A SUBSET OF MLRA 113**

**a. Laboratory Data from National Soil Survey Laboratory in Lincoln, Nebraska**

<u>Sampled As</u>	<u>Lab Number</u>	<u>Publication Symbol</u>	<u>Publication Name or Component Name</u>
Banlic	84IL191010	8787A	Banlic
Belknap	86IL191054	3382A	Belknap
Blair	86IL191033	652C2	Passport
Bonnie	85IL191023	3108T	Bonnie
Cisne	86IL191032	2A	Cisne
Grantsburg	84IL191008	301B	Grantsburg
Hickory	83IL191020	947D2	Hickory-Kell
Patton	86IL191092	3468A	Lakaskia
Sexton	86IL191102	3208A	Sexton
Wynoose	84IL191018	12A	Wynoose
Zanesville	84IL191021	340C3	Zanesville

**b. Laboratory Data from the University of Illinois Pedology Laboratory in Champaign, Illinois**

<u>Sampled As</u>	<u>Lab Number</u>	<u>Publication Symbol</u>	<u>Publication Name or Component Name</u>
Atlas	86IL191001	7C3	Atlas
Banlic	86IL191004	3787A	Banlic
Belknap	84IL191019	3382A	Belknap
Belknap	85IL191020	3382A	Belknap*
Belknap	85IL191022	3382A	Belknap*
Blair	84IL191006	652C2	Passport
Blair	84IL191009	652C2	Passport
Ursa	85IL191004	652C2	Passport*
Bonnie	85IL191011	3108T	Bonnie
Bonnie	85IL191012	3108T	Bonnie
Bonnie	85IL191014	3108T	Bonnie
Bonnie	85IL191017	3108T	Bonnie
Bonnie	85IL191019	3108T	Bonnie
Bonnie	85IL191021	3108T	Bonnie
Bonnie	85IL191023	3108T	Bonnie
Bonnie	85IL191024	3108T	Bonnie
Bonnie	85IL191025	3108T	Bonnie
Bonnie	86IL191005	3108T	Bonnie
Zipp variant	84IL191024	3231A	Evansville
Zipp variant	85IL191002	3231A	Evansville
Hoyleton	84IL191012	3A	Hoyleton
Parke	85IL191015	15B2	Parke
Parke	85IL191016	15B2	Parke
Petrolia	85IL191048	3231A	Evansville
Sharon	86IL191002	3072A	Sharon
Sharon	86IL003	3072A	Sharon

\*inclusion in map unit

**c. Engineering Test Data from Illinois Department of Transportation, Springfield, Illinois**

<u>Sampled As</u>	<u>Lab Number</u>	<u>Publication Symbol</u>	<u>Publication Name or Component Name</u>
Banlic	84IL191010	8787A	Banlic
Belknap	86IL191054	3382A	Belknap
Blair	86IL191033	652C2	Passport
Bonnie	86IL191023	3108T	Bonnie
Cisne	86IL191032	2A	Cisne
Grantsburg	84IL191008	301B	Grantsburg
Hickory	83IL191020	947D2	Hickory-Kell
Patton	86IL191092	3468A	Lakaskia
Sexton	86IL191102	3208A	Sexton
Wynoose	84IL191018	12A	Wynoose
Zanesville	84IL191021	340C3	Zanesville

\*inclusion in map unit

**d. Other Data from the Pedology Laboratory, University of Illinois, not to be published in the national pedon data file.**

<u>Sampled As</u>	<u>Lab Number</u>	<u>Publication Symbol</u>	<u>Publication Name or Component Name</u>
Ava	85IL191053	14B2	Ava
Piopolis	85IL191013	3420A	Cape
Hurst	84IL191023	3483A	Henshaw*
Piopolis	85IL191001	3420A	Piopolis
Bluford	84IL191014	13A	Bluford
Sexton	86IL191029	3208A	Sexton
Zanesville	83IL191012	340D3	Zanesville

\*inclusion in map unit

**Notes to accompany the  
Classification and Correlation  
of the Soils in  
Wayne County, Illinois  
Prepared by Troy Fehrenbacher**

This correlation document updates the correlation of soils in soil report #148. Most of the series in this document were correlated in soil report #148. Added series are indicated by "Added". Dropped series are indicated by "Dropped".

**Standardization of Slope Ranges:** All slopes for Wayne County have been updated to the standard slope ranges in use at the time of this correlation.

A -slope -- 0 to 2 percent      B-slope -- 2 to 5 percent      C-slope -- 5 to 10 percent  
D-slope -- 10 to 18 percent      F-slope -- 18 to 35 percent      G-slope -- 35 to 60 percent

Flooding prefix "1", "3", "7", or "8" was added to all soils subject to flooding.

Slope letter "A" was added to all level or nearly level mapping units.

**Units correlated to Rarely flooded:** These soils typically occur in areas of the FEMA flood zone or predicted flood area based on flooding data, elevation maps, and FEMA maps.

**Units correlated from Rarely flooded:** Map units protected by levees and previously identified as rarely flooded correlate to the flooding frequency that would be prevalent if the levees were not in place.

**ATLAS SERIES-** (tax) Map unit 7C3. Atlas soils are taxadjuncts to the series because they have less expansive clay in the subsoil and have evidence of saturation in all layers below the surface. These soils were formed in glacial till rather than accretion gley. Classification for Atlas soils will be Fine, smectitic, mesic Aeric Endoaqualls. 7C3 DMU# 463164

**AVA SERIES-** Map units 14B, 14C2, and 14C3. Map unit 14C3 correlates to 10C, Plumfield. See Plumfield series. 14B DMU# 155488; 14B2 DMU# 541625; 14C2 DMU# 155489

**BANLIC SERIES-** Map units 3787 and 8787 correlate to 3787A and 8787A, respectively. Current series classification is under review. 3787A DMU# 533391; 8787A DMU# 533395

**BELKNAP SERIES-** Map units 3382 and 8382 correlate to 3382A and 8382A, respectively. Series classification was changed from Entisols to Inceptisols based on the original series concept and the presence of a cambic horizon in the majority of pedons in most survey areas where the series occurs. Pedon descriptions, associated soils, and lab data indicate that there may be more development present than originally thought. Current series classification is under review. Series classification is Coarse-silty, mixed, active, acid, mesic Fluvaquentic Endoaquepts. 3382A DMU# 541398; 8382A DMU# 533394

**BLAIR SERIES-** Map units 5C2 and 5C3. Map unit 5C3 correlates to 652C2. See Passport series. Blair soils were mapped as fine-loamy taxadjuncts in the previous survey. Discussion with the former project leader revealed that 5C2 and 5C3 soils were separated on depth to second parent material rather than erosion of the surface layer. 5C3 soils were dominant in the area and had loamy sediments higher in the profile than 5C2 soils which resulted in a fine-loamy particle-size class but there were not any soils set up at the time to address that issue. Since the last survey a new series was established to address the fine-loamy taxadjunct. Map unit 5C2 is correlated as fine-silty and no longer is a taxadjunct to the series. 5C2 DMU# 508248

**BLUFORD SERIES-** Map units 13A, 13B, and 13C2. Pedon descriptions of the Bluford series in Wayne County indicate that the classification ranges slightly drier than the OSD. The majority of Bluford map units meet OSD classification and concept of the series. Past mapping has allowed the classification and range of characteristics to vary.. 13A DMU# 155486; 13B DMU# 494722; 13B2 DMU# 493989

**BONNIE SERIES-** Map units 1108, 3108 and 7108. 3108 correlates to 3108A and 3108T. 1108 correlates to 1108T. Map unit 7108 correlates to 3108T. Current series classification is under review. Our study of these soils in Wayne and Marion Counties shows that there is much more pedogenic development in Bonnie soils than originally thought. It has been decided that all Bonnie polygons contained within county boundaries will be a taxadjunct for this update. Pedon descriptions in this county and adjacent counties, pit observations, and characterization lab data, all suggest to us that these soils are *Fine-silty, mixed, active, mesic Albic Glossic Natraqualfs*. Bonnie soils are mapped in Indiana, Kentucky and other southern counties in Illinois. At this point in time there is not a unanimous consensus on the classification, therefore it has been decided that the interim classification of the taxadjunct will be Fine-silty, mixed, active, acid, mesic Sodic Vermaquepts until further study of the series has been completed. All map units that join a county will retain the current classification of the Bonnie OSD. There has been no initiative to set up a new series or reclassify the current Bonnie OSD at this time due to lack of field work in other counties. Once extensive field work has been completed it will be decided if the Bonnie soils in Wayne County should be a taxadjunct to the Bonnie series, if a new series needs to be established, or if the Bonnie series needs to be reclassified. To separate the taxadjunct Bonnie soils from those that will retain the current OSD classification, because all Bonnie soils are on an A slope, the traditional slope letter will be replaced with a T to indicate these are taxadjunct soils. A sodic phase will be added to the map unit name to distinguish it from Bonnie's non-taxadjunct counterpart. 3108A DMU# 154056; 3108T DMU# 533546; 1108T DMU# 533534

**CAPE SERIES-** Map unit 3422 correlates to 3422A. Series classification has changed since the last survey from Entisols to Inceptisols based on the original series concept and the presence of a cambic horizon in the majority of pedons. Series classification is Fine, smectitic, acid, mesic Vertic Endoaquepts. Some pedons have a hue of 5Y and some pedons are moderately acid in the lower part of the profile which is outside the range in characteristics for the series. 3422A DMU# 540692

**CISNE SERIES-** Map unit 2 correlates to 2A. 2A DMU# 155381

**CREAL SERIES-** Map unit 337 correlates to 337A and to 7337A where they are within FEMA boundaries. 337A DMU# 538255; 7337A DMU# 533706

**EVANSVILLE SERIES-** Map unit 3231 correlates to 3231A. Petrolia, 3288 and 7288 correlate to 3231A. 3231A DMU# 540614

**FRONDORF SERIES-** Dropped. See Hickory and Kell.

**GEFF SERIES-** Map unit 432 is correlated to 7432A. All map units fall within FEMA boundaries. 7432A DMU# 533368

**GRANTSBURG SERIES-** Map unit 301B. Some pedons have a pH that ranges to extremely acid which is outside the range in characteristics for the series. 301B DMU# 538010

**HENSHAW SERIES-** (tax). Map unit 3483 correlates to 3483A. Field work has identified a fragic layer that usually occurs about 100 cm. Field estimates put these soils into the fine family rather than the fine-silty family. These Henshaw soils lack carbonates within 60 inches. Henshaw soils will be a taxadjunct for this update. Classification for Henshaw soils will be Fine, mixed, superactive, mesic Fragiatic Hapludalfs. 3483A DMU# 533381

**HICKORY SERIES-** Map units 8D2, 8D3, 8E, 8E3, and 8F. Map unit 8D2 (10 to 15 percent slopes) correlates to 947D2 (10 to 18 percent slopes), Hickory-Passport complex. Map unit 8D3 (10 to 15 percent slopes) correlates to 8D3 (10 to 18 percent slopes) and will remain on the legend for joins with Jefferson County only. All other 8D3 (10 to 15 percent slopes) map units correlate to 947D3 (10 to 18 percent slopes), Hickory-Passport complex. Surface textures will also change from a silt loam to a clay loam. Map unit 8E (15 to 20 percent slopes) correlates to 8F (18 to 35 percent slopes) and 947D2 (10 to 18 percent slopes). Surface textures will also change from loam to silt loam. Map unit 8E3 (15 to 20 percent slopes) correlates to 947D3 (10 to 18 percent slopes) and 8F (18 to 35 percent slopes). Land use and topographic maps will be used to determine which map units 8E and 8E3 will be correlated to. 8E and 8E3 units that are in cropland or pasture will correlate to 947D2 and 947D3, respectively. If the map unit is wooded and supported by the topographic map it will correlate to 8F otherwise it will correlate to 947D2 or 947D3 as described above. Hickory soils were originally mapped as well drained and moderately well drained soils. Since the last update the Hickory series has been revised to only allow well drained soils and no other series have been set up to address the moderately well drained component. There is suspicion that these gray colors are relict features and are not due to present conditions. Therefore, moderately well drained soils will be considered inclusions within the Hickory map unit. Map units 908D2 and 908F, Hickory-Kell complex, will be added to the legend to replace the Frondorf series, 786E and 786F. 8D3 DMU# 473588; 8F DMU# 140215; 908D2 DMU# 459612; 908F DMU# 447769; 947D2 DMU# 533451; 947D3 DMU# 533452

**HOYLETON SERIES-** Map units 3A and 3B. Hoyleton soils on a B slope are taxadjuncts for this update. Field reviews and notes prior to the 1996 survey indicate that the B slope map units should be taxadjuncts due to less clay in the control section making the family fine-silty vs. fine. However, the taxadjunct did not carry over to the correlation document or manuscript. B slope soils have a higher chroma in the B horizons than allowed in the OSD range in characteristics. Classification for Hoyleton soils on a B slope will be Fine-silty, mixed, superactive, mesic Aquollic Hapludalfs. 3A DMU# 155382; 3B DMU# 533692

**LAKASKIA SERIES-** Added. Patton, 3142, is correlated to Lakaskia, 3468A. National Soil Survey Laboratory data places this series in the "fine" family. Multiple soil cores were pulled from various map units and reviewed during the correlation conference and field review. Samples were taken from the particle size control section for each of the cores and particle size distribution was performed using the hydrometer method. Results confirmed the presence of an argillic horizon in addition to being in the "fine" family. This series is being correlated to address these issues. 3468A DMU# 533713

**KELL SERIES-** Added. Frondorf, 786E and 786F correlated to Hickory-Kell complex, 908D2 and 908F. Kell soils formed in glacial drift over residuum versus Frondorf soils which formed in loess over residuum. See Hickory.

**MISCELLANEOUS WATER-** Added. Previously identified with special symbol W (water). Water units (W) identified as water treatment or animal waste lagoons correlate to miscellaneous water (M-W). M-W DMU# 155361

**NEGLEY SERIES-** (tax). Map units 585D3 and 585F. Map unit 585D3 (10 to 15 percent slopes) will correlate to 585D2 (10 to 18 percent slopes). Map unit 585F (20 to 45 percent slopes) will correlate to 585F (18 to 35 percent slopes). Although there is no lab data available for this series in Wayne County, field texture estimates of pedon descriptions suggest that it would be very difficult to maintain a fine-loamy family and would more than likely be coarse-loamy. Pedon descriptions do not support severe erosion. Negley soils are taxadjuncts for this update. Classification for Negley soils will be Coarse-loamy, mixed, active, mesic, Typic Paleudalfs. 585D2 DMU# 533371; 585F DMU# 533711

**PARKE SERIES-** Map units 15B and 15C2. Map unit 15B will correlate to 15B2. Soils originally mapped as 15B lacked an E horizon indicating it should be moderately eroded. The upper Bt horizons of some pedons may have a higher pH than allowed by the range of characteristics due to liming practices and the lack of an E horizon. 15B2 DMU# 533703; 15C2 DMU# 537942

**PASSPORT SERIES-** Added. Blair, 5C3 correlates to Passport, 652C2. The Passport series was established to address the need for a fine-loamy version of Blair that was continuously being mapped as a taxadjunct. In Passport soils the drift occurs higher in the profile than typical for Blair soils. 652C2 DMU# 533438

**PATTON SERIES-** Dropped. See Lakaskia series.

**PETROLIA SERIES-** Dropped. See Evansville series.

**PIOPOLIS SERIES-** Map units 3420 and 7420 correlate to 3420A. Series classification has changed since the last survey from Entisols to Inceptisols based on the original series concept and the presence of a cambic horizon in the majority of pedons. Series classification is Fine-silty, mixed, active, acid, mesic Fluvaquentic Endoaquepts. The lower part of the solum in some pedons has a slightly lower pH than allowed in the OSD range in characteristics. 3420A DMU# 540651

**PLUMFIELD SERIES-** Added. Map unit Ava, 14C3 is correlated to Plumfield, 10C. The Plumfield series replaces severely eroded Ava soils because most of the Peoria loess is absent resulting in Roxanna silts being very close to surface. The argillic horizon is developed in the Roxana Silts and the fragipan. 10C DMU# 541450

**RACCOON SERIES-** Map unit 109 correlates to 109A and 7109A. 7109A map units fall within FEMA boundaries. Series classification is currently under review for 7109A map units. There is thought that the morphology of Racoon soils mapped in flooded landscape positions is different than that of Racoon soils mapped in upland positions. If verified, this could affect future taxonomic classification and possibly require a new series. These map units typically occur adjacent to Bonnie soils, whose classification is also currently under review. 109 DMU# 492895; 7109A DMU# 533704

**RIDGWAY SERIES-** Map unit 434B correlates to 743B because all map units fall within FEMA boundaries. In some pedons the pH in the lower part of the series control section is lower than allowed in the range in characteristics for the series. 7434B DMU# 466026

**SEXTON SERIES-** Map unit 3208 correlates to 3208A. The lower Btg horizons in some pedons may have a slightly higher pH than allowed in the range in characteristics for the series. 3208A DMU# 533377

**SHARON SERIES-** Map unit 3072 correlates to 3072A. Current series classification is under review. It is believed there is more development in Sharon soils than originally thought. 3072A DMU# 533712

**UNIONTOWN SERIES-** Map unit 3482C correlates to 3482C2. The solum for Uniontown soils are slightly thicker than allowed for the series and also lack secondary calcium carbonate concretions as required by the series. 3482C2 DMU# 533379

**WATER-** Previously identified with special symbol W. W DMU# 155171.

**WYNOOSE SERIES-** Map unit 12 correlates to 12A. 12A DMU# 155485

**ZANESVILLE SERIES-** Map units 340C3, 340D2, and 340D3. Map unit 340D3 (10 to 15) percent slopes correlates to 340D3 (10 to 18) percent slopes and will remain on the legend for joins with Jefferson and White Counties only. All other 340D3 (10 to 15) percent slopes map units correlate to 340D2 (10 to 18) percent slopes. Pedon descriptions do not support severe erosion. Map unit 340D2 (10 to 15) percent slopes correlates to 340D2 (10 to 18) percent slopes. Map unit 340C3 (5 to 10) percent slopes correlates to 340C2 (5 to 10) percent slopes. Pedon descriptions do not support severe erosion. Zanesville soils on C2 and D2 slopes will be taxadjuncts for this update. Field reviews and notes describe the fragic layer as less brittle than required for a fragipan. This qualifies it as having fragic characteristics rather than being a true fragipan. The fragic layer also occurs higher in the profile than allowed in the series range in characteristics. The classification for Zanesville soils on C2 and D2 slopes will be Fine-silty, mixed, active, mesic Fragic Oxyaquic Hapludalfs. 340D3 DMU# 480557; 340D2 DMU# 533710; 340C2 DMU# 533709

**ZIPP SERIES-** Map units 3524, 3524+, and 1524 correlate to 3524A, 3524A+, and 1524A. The lower Bg horizons in some pedons may have a slightly higher pH than allowed in the range in characteristics for the series. 3524A DMU# 540269; 3524A+ DMU# 533384; 1524A DMU# 533374

## Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series.)

Soil name	Family or higher taxonomic class
*Atlas-----	Fine, smectitic, mesic Aeric Endoaqualfs
Ava-----	Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs
Banlic-----	Coarse-silty, mixed, active, acid, mesic Fragic Epiaquepts
Belknap-----	Coarse-silty, mixed, active, acid, mesic Fluvaquentic Endoaquepts
Blair-----	Fine-silty, mixed, superactive, mesic Aquic Hapludalfs
Bluford-----	Fine, smectitic, mesic Aeric Fragic Epiaqualfs
Bonnie-----	Fine-silty, mixed, active, acid, mesic Typic Fluvaquents
*Bonnie-----	Fine-silty, mixed, active, mesic Sodic Vermaquepts
Cape-----	Fine, smectitic, acid, mesic Vertic Endoaquepts
Cisne-----	Fine, smectitic, mesic Mollic Albaqualfs
Creal-----	Fine-silty, mixed, superactive, mesic Aeric Endoaqualfs
Evansville-----	Fine-silty, mixed, superactive, nonacid, mesic Typic Endoaquepts
Geff-----	Fine-silty, mixed, superactive, mesic Aquic Hapludalfs
Grantsburg-----	Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs
*Henshaw-----	Fine, mixed, superactive, mesic Fragiaquic Hapludalfs
Hickory-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Hoyleton-----	Fine, smectitic, mesic Aquollic Hapludalfs
*Hoyleton-----	Fine-silty, mixed, superactive, mesic Aquollic Hapludalfs
Kell-----	Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Lakaskia-----	Fine, mixed, superactive, mesic Vertic Argiaquolls
*Negley-----	Coarse-loamy, mixed, active, mesic Typic Paleudalfs
Parke-----	Fine-silty, mixed, active, mesic Ultic Hapludalfs
Passport-----	Fine-loamy, mixed, active, mesic Aquic Hapludalfs
Piopolis-----	Fine-silty, mixed, active, acid, mesic Fluvaquentic Endoaquepts
Plumfield-----	Fine-silty, mixed, active, mesic Aquic Fragiudalfs
Raccoon-----	Fine-silty, mixed, superactive, mesic Typic Endoaqualfs
Ridgway-----	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Sexton-----	Fine, smectitic, mesic Typic Endoaqualfs
Sharon-----	Coarse-silty, mixed, active, acid, mesic Oxyaquic Udifluvents
Uniontown-----	Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs
Wynoose-----	Fine, smectitic, mesic Typic Albaqualfs
Zanesville-----	Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs
*Zanesville-----	Fine-silty, mixed, active, mesic Fragic Oxyaquic Hapludalfs
Zip-----	Fine, mixed, active, nonacid, mesic Typic Endoaquepts

