United States
Department of
Agriculture

**Natural Resources
Conservation
Service**

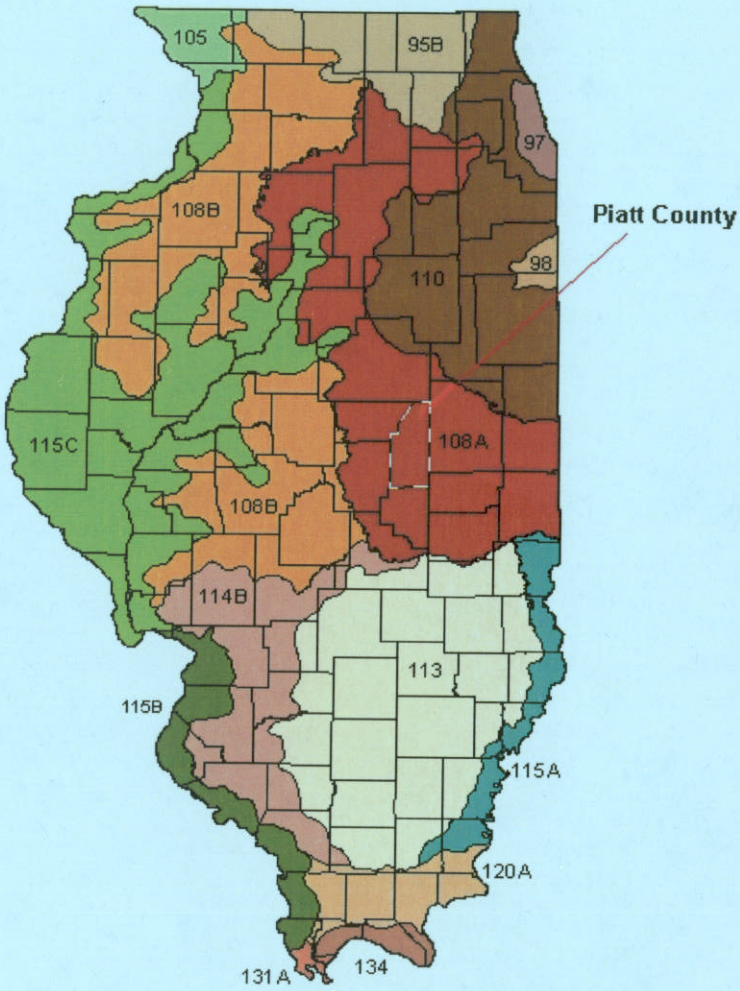
**East Central
Glaciated Regional
MLRA
Soil Survey Office
Indianapolis, IN**

Classification and Correlation of Soils in Piatt County, Illinois

A Subset of MLRA 108A

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



February 2009

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UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CLASSIFICATION AND CORRELATION OF THE SOILS OF PIATT COUNTY, ILLINOIS

A SUBSET OF MLRA 108A

February 2009

This correlation was prepared by Chris Cochran, MLRA Soil Scientists, Charleston, IL; Ronald D. Collman, Soil Scientist, Champaign, IL; and Asghar A. Chowdhery, Soil Data Quality Specialist (SDQS) MLRA Region 11 team, Indianapolis, IN. as a summarization of decisions made at the correlation conference held on August 6-7, 2007. It was prepared as part of the update of the Soil Survey of Piatt County, a subset of MLRA 108A. It is based on transect data, pedon descriptions, laboratory data, field soil maps, join statements, and a descriptive legend. Sources used in the literature review include "Classification and Correlation of the Soils of Piatt County, Illinois" – March, 1986, and the published "Soil Survey of Piatt County, Illinois" – December, 1991.

HEADNOTE FOR DETAILED SOIL SURVEY LEGEND

This update of Piatt County, Illinois is an update subset of the Soil Survey of Major Land Resource Area MLRA 108A. Map unit names, 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. A final number of 2 following the slope letter indicate 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 Piatt County, Illinois: Detailed Soil Map Legend

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
43 43A	Ipava silt loam Ipava silt loam, 0 to 2 percent slopes	43A	Ipava silt loam, 0 to 2 percent slopes
56B	Dana silt loam, 2 to 5 percent slopes	56B	Dana silt loam, 2 to 5 percent slopes
56B 56B2	Dana silt loam, 2 to 5 percent slopes Dana silt loam, 2 to 5 percent slopes, eroded	56B2	Dana silt loam, 2 to 5 percent slopes, eroded
56C2 145C2	Dana silty clay loam, 5 to 10 percent slopes, eroded Saybrook silt loam, 5 to 8 percent slopes, eroded	56C2	Dana silty clay loam, 5 to 10 percent slopes, eroded
56C3 145C2	Dana silty clay loam, 5 to 10 percent slopes, severely eroded Saybrook silt loam, 5 to 8 percent slopes, eroded	56C3	Dana silty clay loam, 5 to 10 percent slopes, severely eroded
67 67A	Harpster silty clay loam Harpster silty clay loam, 0 to 2 percent slopes	67A	Harpster silty clay loam, 0 to 2 percent slopes
68 68A	Sable silty clay loam Sable silty clay loam, 0 to 2 percent slopes	68A	Sable silty clay loam, 0 to 2 percent slopes
134B 373B	Camden silt loam, 2 to 5 percent slopes Camden silt loam, sandy substratum, 1 to 5 percent slopes	134B	Camden silt loam, 2 to 5 percent slopes
136 136A	Brooklyn silt loam Brooklyn silt loam, 0 to 2 percent slopes	136A	Brooklyn silt loam, 0 to 2 percent slopes
148B2 374B	Proctor silt loam, 2 to 5 percent slopes, eroded Proctor silt loam, sandy substratum, 2 to 5 percent slopes	148B2	Proctor silt loam, 2 to 5 percent slopes, eroded
148C2 374C2	Proctor silt loam, 5 to 10 percent slopes, eroded Proctor silt loam, sandy substratum, 5 to 10 percent slopes, eroded	148C2	Proctor silt loam, 5 to 10 percent slopes, eroded
148C3 374C2	Proctor silty clay loam, 5 to 10 percent slopes, severely eroded Proctor silt loam, sandy substratum, 5 to 10 percent slopes, eroded	148C3	Proctor silty clay loam, 5 to 10 percent slopes, severely eroded

Soil Correlation of Piatt County, Illinois: Detailed Soil Map Legend

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
152	Drummer silty clay loam	152A	Drummer silty clay loam, 0 to 2 percent slopes
152A	Drummer silty clay loam, 0 to 2 percent slopes		
153	Pella silty clay loam	153A	Pella silty clay loam, 0 to 2 percent slopes
153A	Pella silty clay loam, 0 to 2 percent slopes		
154	Flanagan silt loam	154A	Flanagan silt loam, 0 to 2 percent slopes
154A	Flanagan silt loam, 0 to 2 percent slopes		
171B	Catlin silt loam, 2 to 5 percent slopes	171B	Catlin silt loam, 2 to 5 percent slopes
171B	Catlin silt loam, 2 to 5 percent slopes	171B2	Catlin silt loam, 2 to 5 percent slopes, eroded
171B2	Catlin silt loam, 2 to 5 percent slopes, eroded		
198	Elburn silt loam	198A	Elburn silt loam, 0 to 2 percent slopes
198A	Elburn silt loam, 0 to 2 percent slopes		
199B	Plano silt loam, 1 to 5 percent slopes	199B	Plano silt loam, 2 to 5 percent slopes
199B	Plano silt loam, 2 to 5 percent slopes		
199B	Plano silt loam, 1 to 5 percent slopes	199B2	Plano silt loam, 2 to 5 percent slopes, eroded
199B2	Plano silt loam, 2 to 5 percent slopes, eroded		
223B2	Varna silty clay loam, 2 to 6 percent slopes, eroded	223B2	Varna silty clay loam, 2 to 4 percent slopes, eroded
223B2	Varna silty clay loam, 2 to 4 percent slopes, eroded		
234	Sunbury silt loam	234A	Sunbury silt loam, 0 to 2 percent slopes
234A	Sunbury silt loam, 0 to 2 percent slopes		
236	Sabina silt loam	236A	Sabina silt loam, 0 to 2 percent slopes
236A	Sabina silt loam, 0 to 2 percent slopes		
242A	Kendall silt loam, 0 to 2 percent slopes	242A	Kendall silt loam, 0 to 2 percent slopes
372	Kendall silt loam, sandy substratum		
243B	St. Charles silt loam, 2 to 5 percent slopes	243B	St. Charles silt loam, 2 to 5 percent slopes
371B	St. Charles silt loam, sandy substratum, 1 to 5 percent slopes		
244	Hartsburg silty clay loam	244A	Hartsburg silty clay loam, 0 to 2 percent slopes
244A	Hartsburg silty clay loam, 0 to 2 percent slopes		

Soil Correlation Of Piatt County, Illinois:
Detailed Soil Map Legend

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
291B	Xenia silt loam, 1 to 5 percent slopes	291B	Xenia silt loam, 2 to 5 percent slopes
291B	Xenia silt loam, 2 to 5 percent slopes		
322B	Russell silt loam, 2 to 5 percent slopes	322B	Russell silt loam, 2 to 5 percent slopes
322C2	Russell silt loam, 5 to 10 percent slopes, eroded	322C2	Russell silt loam, 5 to 10 percent slopes, eroded
330	Peotone silty clay loam	330A	Peotone silty clay loam, 0 to 2 percent slopes
330A	Peotone silty clay loam, 0 to 2 percent slopes		
27C2	Miami loam, 5 to 10 percent slopes, eroded	570C2	Martinsville loam, 5 to 10 percent slopes, eroded
373B	Camden silt loam, sandy substratum, 1 to 5 percent slopes		
570C2	Martinsville loam, 5 to 10 percent slopes, eroded		
27C2	Miami loam, 5 to 10 percent slopes, eroded	618C2	Senachwine silt loam, 5 to 10 percent slopes, eroded
618C2	Senachwine silt loam, 5 to 10 percent slopes, eroded		
27D2	Miami loam, 10 to 15 percent slopes, eroded	618D2	Senachwine silt loam, 10 to 18 percent slopes, eroded
618D2	Senachwine silt loam, 10 to 18 percent slopes, eroded		
27E	Miami loam, 15 to 25 percent slopes	618F	Senachwine silt loam, 18 to 35 percent slopes
618F	Senachwine silt loam, 18 to 35 percent slopes		
27G	Miami loam, 25 to 50 percent slopes	618G	Senachwine silt loam, 35 to 60 percent slopes
618G	Senachwine silt loam, 35 to 60 percent slopes		
221C2	Parr loam, 5 to 10 percent slopes, eroded	622C2	Wyanet silt loam, 5 to 10 percent slopes, eroded
622C2	Wyanet silt loam, 5 to 10 percent slopes, eroded		
221C2	Parr loam, 5 to 10 percent slopes, eroded	622C3	Wyanet clay loam, 5 to 10 percent slopes, severely eroded
622C3	Wyanet clay loam, 5 to 10 percent slopes, severely eroded		
152	Drummer silty clay loam	721A	Drummer and Elpaso silty clay loams, 0 to 2 percent slopes
721A	Drummer and Elpaso silty clay loams, 0 to 2 percent slopes		

Soil Correlation Of Piatt County, Illinois: Detailed Soil Map Legend

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
152	Drummer silty clay loam	722A	Drummer-Milford silty clay loams, 0 to 2 percent slopes
722A	Drummer-Milford silty clay loams, 0 to 2 percent slopes		
802B	Orthents, loamy, undulating	802B	Orthents, loamy, undulating
865	Pits, gravel	865	Pits, gravel
74	Radford silt loam	3074A	Radford silt loam, 0 to 2 percent slopes, frequently flooded
3074A	Radford silt loam, 0 to 2 percent slopes, frequently flooded		
107	Sawmill silty clay loam	3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded
3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded		
284	Tice silty clay loam	3284A	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded
3284A	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded		
373B	Camden silt loam, sandy substratum, 1 to 5 percent slopes	7134B	Camden silt loam, 2 to 5 percent slopes, rarely flooded
371B	St. Charles silt loam, sandy substratum, 1 to 5 percent slopes		
7134B	Camden silt loam, 2 to 5 percent slopes, rarely flooded		
374B	Proctor silt loam, sandy substratum, 2 to 5 percent slopes		
134B	Camden silt loam, 2 to 5 percent slopes		
152	Drummer silty clay loam	7722A	Drummer-Milford silty clay loams, 0 to 2 percent slopes, rarely flooded
722A	Drummer-Milford silty clay loams, 0 to 2 percent slopes		
7722A	Drummer-Milford silty clay loams, 0 to 2 percent slopes, rarely flooded		
597	Armiesburg silt loam	8597A	Armiesburg silt loam, 0 to 2 percent slopes, occasionally flooded
8597A	Armiesburg silt loam, 0 to 2 percent slopes, occasionally flooded		
M-W	Miscellaneous Water	M-W	Miscellaneous Water
W	Water	W	Water

Series established by this correlation: none.

Series or components added to the previous correlated legend (March 1986): Elpaso, Martinsville, Milford, Senachwine, Wyanet

Series dropped from the previously correlated legend (March 1986): Miami, Parr, Saybrook

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 Piatt County Soil and Water Conservation District. Financial assistance was made available by the Piatt County Board and the Illinois Department of Agriculture."

The last soil survey of Piatt County was completed in 1986 and was published by the United States Department of Agriculture, Natural Resources Conservation Service in 1991. It is Illinois Agricultural Experiment Station Soil Report No. 134, "Soil Survey of Piatt County, Illinois". Reference to the prior soil survey will be included in the literature citation of the manuscript. This update replaces the 1991 soil survey and provides additional data, updated soil interpretations, and digital soil maps at a 1:12,000 scale on an orthophoto base.

Disposition of field sheets: The publication soil map materials used for Soil Report No. 134 were compiled using "Ortho-Mapper" 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 Montana Digitizing Center. The final SSURGO certified product will be available at the Soil Datamart, the NRCS state office, and will be provided to the Piatt 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 Montana 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.

NRCS-SOI-37a
REVISED MAY 2001

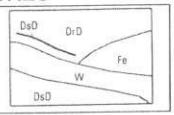
FEATURE AND SYMBOL LEGEND FOR SOIL SURVEY

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES
CONSERVATION SERVICE

Soil Survey Area: Piatt County
State: Illinois

Date: 15 May, 2008

SOIL SURVEY FEATURES

SOIL DELINEATIONS AND LABELS	

STANDARD LANDFORM AND MISCELLANEOUS SURFACE FEATURES

Non-bedrock escarpment	
Short steep slope	
Closed depression	
Gravel pit	
Marsh or swamp	
Sandy spot	
Severely eroded spot	
Wet spot	

AD HOC FEATURES

Calcareous spot	29	

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.	

ROAD EMBLEMS

Interstate	
Federal	
State	

DESCRIPTIONS FOR STANDARD LANDFORM AND MISCELLANEOUS SURFACE FEATURES FOR PIATT COUNTY, ILLINOIS

LABEL	NAME	DESCRIPTION
DEP	Depression, closed	A shallow, saucer-shaped area that is slightly lower on the landscape than the surrounding area and is without a natural outlet for surface drainage. Typically 1/4 to 2 acres.
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 severely eroded, very severely eroded, or gullied. Typically 1 to 5 acres.
ESO	Escarpment, non-bedrock	A relatively continuous and steep slope or cliff, which generally is produced by erosion but can be produced by faulting, that breaks the continuity of more gently sloping land surfaces. Exposed earthy material is nonsoil or very shallow soil.
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 1/4 to 3 acres.
MAR	Marsh or swamp	A water-saturated, very poorly drained area, intermittently or permanently covered by water. Sedges, cattails, and rushes dominate marsh areas. Trees or shrubs dominate swamps. Not used in map units where the named components are poorly or very poorly drained. Typically 1/4 to 3 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 1/4 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.
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 1/4 to 2 acres.

DESCRIPTION FOR AD HOC FEATURES		
LABEL	NAME	DESCRIPTION
CSP	Calcareous spot	A spot where the surface layer contains carbonates in areas where the surface layer of the named soils in the surrounding map unit is noncalcareous. Effervescence can be detected by dilute hydrochloric acid. Typically 1/4 to 2 acres.

Soil Map Unit Symbol Conversion Legend, Piatt County, Illinois

Field symbol	Publication symbol
43	43A
43A	43A
56B	56B
56B	56B2
56B2	56B2
56C2	56C2
145C2	56C2
56C3	56C3
145C2	56C3
67	67A
67A	67A
68	68A
68A	68A
134B	134B
373B	134B
136	136A
136A	136A
148B2	148B2
374B	148B2
148C2	148C2
374C2	148C2
148C3	148C3
374C2	148C3
152	152A
152A	152A
153	153A
153A	153A
154	154A
154A	154A
171B	171B
171B	171B2
171B2	171B2
198	198A
198A	198A
199B	199B
199B	199B
199B	199B2
199B2	199B2
223B2	223B2
223B2	223B2
234	234A

Field symbol	Publication symbol
236	236A
236A	236A
242A	242A
372	242A
243B	243B
371B	243B
244	244A
244A	244A
291B	291B
291B	291B
322B	322B
322C2	322C2
330	330A
330A	330A
27C2	570C2
373B	570C2
570C2	570C2
27C2	618C2
618C2	618C2
27D2	618D2
618D2	618D2
27E	618F
618F	618F
27G	618G
618G	618G
221C2	622C2
622C2	622C2
221C2	622C3
622C3	622C3
152	721A
721A	721A
152	722A
722A	722A
802B	802B
865	865
74	3074A
3074A	3074A
107	3107A
3107A	3107A

Field symbol	Publication symbol
134B	7134B
371B	7134B
373B	7134B
374B	7134B
7134B	7134B
152	7222A
722A	7222A
7222A	7222A
597	8597A
8597A	8597A
M-W	M-W
W	W

Field symbol	Publication symbol

Field symbol	Publication symbol
234A	234A

Field symbol	Publication symbol
284	3284A
3284A	3284A

Field symbol	Publication symbol

Field symbol	Publication symbol

Soil Identification Legend According to Alphabetical Sequence

Map symbol	Approved map unit name
8597A	Armiesburg silt loam, 0 to 2 percent slopes, occasionally flooded
136A	Brooklyn silt loam, 0 to 2 percent slopes
134B	Camden silt loam, 2 to 5 percent slopes
7134B	Camden silt loam, 2 to 5 percent slopes, rarely flooded
171B	Catlin silt loam, 2 to 5 percent slopes
171B2	Catlin silt loam, 2 to 5 percent slopes, eroded
56B	Dana silt loam, 2 to 5 percent slopes
56B2	Dana silt loam, 2 to 5 percent slopes, eroded
56C2	Dana silty clay loam, 5 to 10 percent slopes, eroded
56C3	Dana silty clay loam, 5 to 10 percent slopes, severely eroded
721A	Drummer and Elpaso silty clay loams, 0 to 2 percent slopes
152A	Drummer silty clay loam, 0 to 2 percent slopes
722A	Drummer-Milford silty clay loams, 0 to 2 percent slopes
7722A	Drummer-Milford silty clay loams, 0 to 2 percent slopes, rarely flooded
198A	Elburn silt loam, 0 to 2 percent slopes
154A	Flanagan silt loam, 0 to 2 percent slopes
67A	Harpster silty clay loam, 0 to 2 percent slopes
244A	Hartsburg silty clay loam, 0 to 2 percent slopes
43A	Ipava silt loam, 0 to 2 percent slopes
242A	Kendall silt loam, 0 to 2 percent slopes
570C2	Martinsville loam, 5 to 10 percent slopes, eroded
M-W	Miscellaneous Water
802B	Orthents, loamy, undulating
153A	Pella silty clay loam, 0 to 2 percent slopes
330A	Peotone silty clay loam, 0 to 2 percent slopes
865	Pits, gravel
199B	Plano silt loam, 2 to 5 percent slopes
199B2	Plano silt loam, 2 to 5 percent slopes, eroded
148B2	Proctor silt loam, 2 to 5 percent slopes, eroded
148C2	Proctor silt loam, 5 to 10 percent slopes, eroded
148C3	Proctor silty clay loam, 5 to 10 percent slopes, severely eroded
3074A	Radford silt loam, 0 to 2 percent slopes, frequently flooded
322B	Russell silt loam, 2 to 5 percent slopes
322C2	Russell silt loam, 5 to 10 percent slopes, eroded
236A	Sabina silt loam, 0 to 2 percent slopes
68A	Sable silty clay loam, 0 to 2 percent slopes
3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded
618C2	Senachwine silt loam, 5 to 10 percent slopes, eroded
618D2	Senachwine silt loam, 10 to 18 percent slopes, eroded
618F	Senachwine silt loam, 18 to 35 percent slopes
618G	Senachwine silt loam, 35 to 60 percent slopes
243B	St. Charles silt loam, 2 to 5 percent slopes
234A	Sunbury silt loam, 0 to 2 percent slopes

Map symbol	Approved map unit name
223B2	Varna silty clay loam, 2 to 4 percent slopes, eroded
W	Water
622C2	Wyanet silt loam, 5 to 10 percent slopes, eroded
622C3	Wyanet clay loam, 5 to 10 percent slopes, severely eroded
291B	Xenia silt loam, 2 to 5 percent slopes
Map symbol	**Approved map unit name**
3284A	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded

Soil Identification Legend, alphabetical, (cont.)

Soil Identification Legend According to Numerical sequence

Map symbol	Approved map unit name
43A	Ipava silt loam, 0 to 2 percent slopes
56B	Dana silt loam, 2 to 5 percent slopes
56B2	Dana silt loam, 2 to 5 percent slopes, eroded
56C2	Dana silty clay loam, 5 to 10 percent slopes, eroded
56C3	Dana silty clay loam, 5 to 10 percent slopes, severely eroded
67A	Harpster silty clay loam, 0 to 2 percent slopes
68A	Sable silty clay loam, 0 to 2 percent slopes
134B	Camden silt loam, 2 to 5 percent slopes
136A	Brooklyn silt loam, 0 to 2 percent slopes
148B2	Proctor silt loam, 2 to 5 percent slopes, eroded
148C2	Proctor silt loam, 5 to 10 percent slopes, eroded
148C3	Proctor silty clay loam, 5 to 10 percent slopes, severely eroded
152A	Drummer silty clay loam, 0 to 2 percent slopes
153A	Pella silty clay loam, 0 to 2 percent slopes
154A	Flanagan silt loam, 0 to 2 percent slopes
171B	Catlin silt loam, 2 to 5 percent slopes
171B2	Catlin silt loam, 2 to 5 percent slopes, eroded
198A	Elburn silt loam, 0 to 2 percent slopes
199B	Plano silt loam, 2 to 5 percent slopes
199B2	Plano silt loam, 2 to 5 percent slopes, eroded
223B2	Varna silty clay loam, 2 to 4 percent slopes, eroded
234A	Sunbury silt loam, 0 to 2 percent slopes
236A	Sabina silt loam, 0 to 2 percent slopes
242A	Kendall silt loam, 0 to 2 percent slopes
243B	St. Charles silt loam, 2 to 5 percent slopes

Soil Identification Legend According to Numerical sequence (Continued)

Map symbol	Approved soil map unit name
244A	Hartsburg silty clay loam, 0 to 2 percent slopes
291B	Xenia silt loam, 2 to 5 percent slopes
322B	Russell silt loam, 2 to 5 percent slopes
322C2	Russell silt loam, 5 to 10 percent slopes, eroded
330A	Peotone silty clay loam, 0 to 2 percent slopes
570C2	Martinsville loam, 5 to 10 percent slopes, eroded
618C2	Senachwine silt loam, 5 to 10 percent slopes, eroded
618D2	Senachwine silt loam, 10 to 18 percent slopes, eroded
618F	Senachwine silt loam, 18 to 35 percent slopes
618G	Senachwine silt loam, 35 to 60 percent slopes
622C2	Wyanet silt loam, 5 to 10 percent slopes, eroded
622C3	Wyanet clay loam, 5 to 10 percent slopes, severely eroded
721A	Drummer and Elpaso silty clay loams, 0 to 2 percent slopes
722A	Drummer-Milford silty clay loams, 0 to 2 percent slopes
802B	Orthents, loamy, undulating
865	Pits, gravel
3074A	Radford silt loam, 0 to 2 percent slopes, frequently flooded
3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded
3284A	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded
7134B	Camden silt loam, 2 to 5 percent slopes, rarely flooded
7722A	Drummer-Milford silty clay loams, 0 to 2 percent slopes, rarely flooded
8597A	Armiesburg silt loam, 0 to 2 percent slopes, occasionally flooded
M-W	Miscellaneous Water
W	Water

CLASSIFICATION OF PEDONS
SAMPLED FOR LABORATORY ANALYSIS
PIATT COUNTY, ILLINOIS
A SUBSET OF MLRA 108A

A. Laboratory Data from National Soil Survey Laboratory in Lincoln, Nebraska

Sampled As	Lab Number	Publication Symbol	Component Name
Sunbury	83IL147-25-(1-7)	234A	Sunbury silt loam
Sabina	83IL147-031	236A	Sabina silt loam
Xenia	83IL47-035-(1-7)	291B	Xenia silt loam
Russell	83IL147-040	322B	Russell silt loam

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

Sampled As	Lab Number	Publication Symbol	Component Name
Andres	83IL147-039	223B2	Varna silty clay loam
Andres	84IL147-011	223B2	Varna silty clay loam
Brooklyn	83IL147-008	136A	Brooklyn silt loam
Brooklyn	83IL147-042	136A	Brooklyn silt loam
Elburn	81IL147-007	198A	Elburn silt loam
Elliott	84IL147-009	223B2	Varna silty clay loam
Flanagan	82Il147-043	154A	Flanagan silt loam
Harpster	81IL147-005	67A	Harpster silty clay loam
Ipava	82IL147-031	43A	Ipava silt loam
Ipava	82IL147032	43A	Ipava silt loam
Miami	83L147-041	618C2	Senachwine silt loam
Miami	84IL147-012	618C2	Senachwine silt loam
Parr	84IL147-021	622C2	Wyanet silt loam
Parr	84IL147-022	622C3	Wyanet clay loam
Raub	82IL147-013	154A	Flanagan silt loam
Russell	61IL147-001	322B	Russell silt loam
Sabina	82IL147-023	236A	Sabina silt loam
Sable	82IL147-011	68A	Sable silty clay loam
Sunbury	83IL147-025	234A	Sunbury silt loam
Symerton	83IL147-001	223B2	Varna silty clay loam
Toronto	61IL147-002	234A	Sunbury silt loam
Varna	83IL147-033	223B2	Varna silty clay loam
Varna	84IL147-004	223B2	Varna silty clay loam

C. Engineering Test Data from Illinois Department of Transportation, Springfield, Illinois

Sampled As	Lab Number	Publication Symbol	Component Name
Sunbury	83IL147-25-(1-7)	234A	Sunbury silt loam
Xenia	83IL47-035-(1-7)	291B	Xenia silt loam

Notes to accompany the Classification and Correlation of the Soils in Piatt County, Illinois

Prepared by Chris Cochran

Most of these series were previously correlated for soil survey report #134. Series added or dropped are added below.

Standardization of Slope Ranges: All slopes for Piatt County have been updated to the standard slope ranges in use at the time of this correlation. Orthents and Varna are exceptions.

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

Units correlated to Rarely flooded: These soils typically occur in areas of the FEMA 100-year flood zone or predicted flood area based on historical data, flooding data, elevation maps, and FEMA maps for the Sangamon River, Willow Branch, Camp Creek, Madden Run, Goose Creek, Salt Creek, Bonnie Brook, Okaw River Tributary, and Lake Fork.

Champaign County Joins -- As noted below, joins to Champaign County affect Champaign County correlation. Champaign County will require some linking to shared data map units, some minor line changes, and recertification to achieve a perfect join.

Two units of 663B in Champaign County went to 148B2 at join with Piatt. One unit of 570B went to 570C2 at join to Piatt. One unit of 198A in Champaign County went to 148B2 at join to Piatt. One unit of 171B went to 322C2 at the join to Piatt. One unit of 154A and one unit of 171B in Champaign County were merged and went to 322C2 at join to Piatt. One unit of 330A went to 152A at the join. One unit of 236A went to 234A at the join.

Moultrie County Joins -- Three units of 154A in Moultrie County were changed to 56B2 at join to Piatt. Three units of 722A in Moultrie County went to 154A at join to Piatt. One unit of 622C2 went to 56B2 to facilitate join. One unit of 722A went to 3107A at join to Piatt. Two nodes of the Moultrie County line were adjusted to facilitate join. The maps will need to be re-certified.

Douglas County Joins – One unit of 322C2 went to 618F at join to Piatt. One unit of 236A went to 722A at join to Piatt. One unit of 233B went to 236A at join to Piatt. One unit of 618D2 went to 3107A at join to Piatt. The maps will need to be re-certified.

Macon County Joins – One unit of 198A went to 199B at join to Piatt. One unit of 802D went to 802B at join to Piatt. One unit of 291B went to 134B at join to Piatt. The maps will need to be re-certified.

DeWitt County Joins – Perfect Join

McLean County Joins – Perfect Join

Notes to Accompany
Piatt County Correlation (cont.)

Armiesburg-previously correlated as MU-597 in report 134. Changed to 8597A to reflect occasional flooding and 0 to 2 percent slopes. 8597A-DMU-531839.

Brooklyn-previously correlated as MU-136, a taxadjunct to the series in report 134, due to a lack of an abrupt textural change. Although the typical pedon selected in report 134 did lack an abrupt change, field investigation of several other polygons in the survey area indicated that this was not always the case. In addition, series joins with Douglas and Macon fit the series concept. Changed to MU-136A to reflect 0 to 2 percent slopes. 136A-DMU-473315.

Camden-previously correlated as MU-373B to acknowledge a sandy substratum. During a field review in May, 1985, Wiley Scott indicated a field stop of Camden had a loamy sand C horizon. A revisit of the site by myself, Ken Gotsch, and Asghar Chowdhery indicated that the C horizon was stratified sandy loam, loam, and clay loam with thin lenses of loamy sand (1-2 cm thick) Data from associated soils indicates sand content averages about 70-75% and clay content of 10-15%. This is within the range of the series. The consensus was that the C horizon was not sandy enough for a sandy phase. In addition, several Camden polygons fell within FEMAs 100-year flood boundary. Illinois Water Survey gauge data was consulted and units falling within a possible flood condition were mapped as being rarely flooded.134B-DMU-151633; 7134B-DMU-523301

Catlin- previously correlated as MU-171B. Many of the polygons mapped 171B on the ortho photos showed a markedly brighter (whiter) color than other areas of the same. A field examination was completed by Ron Collman and me to determine what this difference was due to. The brighter areas all had epipedons less than 10 inches thick. In addition, many of these areas had a considerably higher content of bleached silt which had worked its way to the surface. Some of the older mapping (pre-1960's) indicated that some of these areas may be transition soils. No transition soil exists currently for the Catlin series. Ken Gotsch observed that even though the silt content was higher than is typical for Mollisols, organic coats were more predominant than silt coats in the upper Bt. He was in favor of mapping these eroded units vs. a new series. Eroded areas are taxadjuncts to the series and are classified as Fine-silty, mixed, superactive, mesic Aquollic Hapludalfs. 171B-DMU-407839; 171B2-DMU-151277

Dana-previously correlated as MU-56B and 145C2. The discussion above, regarding Catlin, holds too for 56B. In May, 1985, RICs for Dana did not allow slopes greater than 6 percent even though the soils morphology fit Dana. Saybrook was brought in as a stop-gap measure to get the proper interpretations. The slope limitation for Dana is no longer a problem. Vintage soil maps were consulted for location of eroded soils. A decision was made in 1985 to roll severely eroded soils in with eroded soils. Field investigation by me, Ron Collman, and Ken Gotsch demonstrated that severely eroded soils were mappable using old surveys and photo-tone. Eroded areas are taxadjuncts to the series and are classified as Fine-silty, mixed, superactive, mesic, Mollic Oxyaquic Hapludalfs. 56B-DMU-153456; 56B2-DMU-153476; 56C2-DMU-155294; 56C3-DMU-533009

Drummer- previously correlated as MU-152. Comments in 1984 field review by Ken Olson indicated some Drummer was in the fine family. Transect data in Moultrie and McLean Counties indicated the same. Three units were used to best capture variations found in the Drummer map unit. In outwash areas Drummer was mapped. In areas dominated by ground moraine, Drummer and Elpaso were mapped as an undifferentiated unit. In broad and flat lake plains as identified in early surveys, Drummer and Milford were mapped as a complex. In areas to the south which are designated flood-prone by FEMA, a rarely flooded unit was delineated. This area suffered major flooding in the spring of 2008. The delineations of these flooded areas were verified at that time. 152A-DMU-151641; 721A-DMU-400377; 722A-DMU-443051; 7722A-DMU-539804.

Elburn- previously correlated as MU-198. Changed to 198A to reflect 0 to 2 percent slopes. 198A-DMU-399244

Elpaso-added; see discussion under Drummer. 721A-DMU-400377

Flanagan- previously correlated as MU-154. Changed to 154A to reflect 0 to 2 percent slopes. 154A-DMU-151643

Harpster- previously correlated as MU-67. Changed to 67A to reflect 0 to 2 percent slopes. 67A-DMU-142575

Hartsburg- previously correlated as MU-244. Changed to 244A to reflect 0 to 2 percent slopes. See Pella. Pella and Hartsburg are very similar except for the their respective C horizons. A tentative line separating the two was developed by Tonier Endres in 2000. With few exceptions, this line was used for separating the two series. 244A-DMU-153413

Ipava- previously correlated as MU-43. Changed to 43A to reflect 0 to 2 percent slopes. Not a lot of discussion here. J. D. Alexander thought that much of what was mapped Ipava would be better mapped Muscatine. 43A-DMU-139401

Kendall- previously correlated as MU-372. Changed to 242A to reflect 0 to 2 percent slopes. Like Camden, Kendall lacked a true sandy substratum. The typical site was cored to 200 cm. PM was loess over stratified outwash over till. Soil is a taxadjunct due to slightly brighter colors in the upper part of the subsoil than is allowed for Aqualfs and are classified as Fine-silty, mixed, superactive, mesic Aquic Hapludalfs. 242A-DMU-531828

Martinsville-added; this soil was mapped on the original survey and then correlated to Miami 27C2. Field investigation indicates that it is a valid unit. In addition, the unit is needed for join purposes. 570C2-DMU-151679

Miami-dropped; correlated to Senachwine

Milford-added; see discussion under Drummer. 722A-DMU-443051;7722A-DMU-539804

Miscellaneous Water-added; 5 areas of water treatment facilities were identified. MW-DMU-155361

Orthents- previously correlated as MU-802B. 802B-DMU-153466

Parr-dropped; correlated to Wyanet

Pella- previously correlated as MU-153. Changed to 153A to reflect 0 to 2 percent slopes. See Hartsburg.153A-DMU-153458

Peotone-previously correlated as MU-330. Changed to 330A to reflect 0 to 2 percent slopes. 330A-DMU-154675.

Pits, gravel-previously correlated as MU-865. 865-DMU-153492

Plano-previously correlated as MU-199B. See discussion under Catlin. Moderately eroded unit added to address areas with less than 10 inch "mollic" surface. Field investigations and review of historic mapping used to assess polygons. Eroded areas are a taxadjunct to the series and are classified as Fine-silty, mixed, superactive, mesic Mollic Hapludalfs. 199B-DMU-156397;199B2-DMU-151287

Proctor-previously correlated as MU-374B and 374C2. Field investigations confirmed that these soils are stratified and do not have sandy substratums. In addition, areas mapped 374B typically had surfaces that were eroded. Severely eroded areas were identified by field investigation, photo interpretation, and review of historic mapping. These soils are taxadjuncts to the Proctor series and are classified as Fine-silty, mixed, superactive, mesic Mollic Halpudalfs.148B2-DMU-408767;148C2-DMU-408850;148C3-DMU-533013

Radford- previously correlated as MU-74. Changed to 3074A to reflect 0 to 2 percent slopes and frequent flooding. 3074A-DMU-153414

Russell- previously correlated as MU-322B and 322C2. 322B-DMU-494353;322C2-DMU-153457

Sabina- previously correlated as MU-236. Changed to 236A to reflect 0 to 2 percent slopes. This soil is a taxadjunct to the series because the soil colors are too bright for the "aquic" soil moisture regime. These soils are classified as Fine, smectitic, mesic Aquic Hapludalfs. 236A-DMU-409602

Sable- previously correlated as MU-68. Changed to 68A to reflect 0 to 2 percent slopes. 68A-DMU-155134

Sawmill-previously correlated as MU-107. Changed to 3107A to reflect 0 to 2 percent slopes and frequent flooding. 3107A-DMU-153474

Saybrook- previously correlated as MU-145C2. Series dropped. In the 1991 soil survey, Dana soils on a "C" slope were correlated to Saybrook (a similar soil) because at that time (1986), Dana was not allowed to be correlated on slopes exceeding 6 percent. Dana is now allowed to be mapped on slopes up to and including 12 percent. Correlated to Dana

Senachwine-previously correlated as Miami: MU-27C2; 27D2; 27E; 27G. In 1992, the fifth edition of Soil Keys introduced the concept of "oxyaquic" and Miami was reclassified. Most of the areas in Illinois mapped as Miami do not fit the "oxyaquic" classification. Senachwine was established for these areas. Slope classes were adjusted to fit the MLRA legend. 618C2-DMU-153459;618D2-DMU-153460;618F-DMU-153461;618G-DMU-153399

St. Charles-previously correlated as MU-371B. As with other sandy substratum soils previously mapped in Piatt County, re-examination indicated that these soils were indeed stratified and did meet the definition of a sandy substratum. 243B-DMU-140161

Sunbury-previously correlated as MU-234. Changed to 234A to reflect slope of 0 to 2 percent. 234A-DMU-153453

Tice-previously correlated as MU-284. Changed to 3284A to reflect 0 to 2 percent slopes and frequent flooding. 3284A-DMU-154609

Varna-previously correlated as MU-223B2. Slope class adjusted to fit MLRA class of 0 to 4 percent slopes223B2-DMU-153464

Water-previously correlated as a conventional water feature symbol. Changed to W so areas could be digitized for analysis. W-DMU-155171

Wyanet-previously correlated as MU-221C2. In 1992, the fifth edition of Soil Keys introduced the concept of "oxyaquic" and Parr was reclassified. Most of the areas in Illinois mapped as Parr do not fit the "oxyaquic" classification. Wyanet was established for these areas. Some areas mapped as moderately eroded were actually severely eroded. Field investigations, photo interpretation, and historic mapping were reviewed to identify these areas and map them. These soils are taxadjuncts to the Wyanet series and are classified as Fine-loamy, mixed, active, mesic Mollic Hapludalfs. 622C2-DMU-153462;622C3-DMU-533008

Xenia-previously correlated as MU-291B. 291B-DMU-151661

Piatt County, Illinois

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
Armiesburg	Fine-silty, mixed, superactive, mesic Fluventic Hapludolls
Brooklyn	Fine, smectitic, mesic Mollic Albaqualfs
Camden	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Catlin	Fine-silty, mixed, superactive, mesic Oxyaquic Argiudolls
*Catlin	Fine-silty, mixed, superactive, mesic Aquollic Hapludalfs
Dana	Fine-silty, mixed, superactive, mesic Oxyaquic Argiudolls
*Dana	Fine-silty, mixed, superactive, mesic Mollic Oxyaquic Hapludalfs
Drummer	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Elburn	Fine-silty, mixed, superactive, mesic Aquic Argiudolls
Elpaso	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Flanagan	Fine, smectitic, mesic Aquic Argiudolls
Harpster	Fine-silty, mixed, superactive, mesic Typic Calciaquolls
Hartsburg	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Ipava	Fine, smectitic, mesic Aquic Argiudolls
*Kendall	Fine-silty, mixed, superactive, mesic Aquic Hapludalfs
Martinsville	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Milford	Fine, mixed, superactive, mesic Typic Endoaquolls
Orthents	Loamy, mesic Udorthents
Pella	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Peotone	Fine, smectitic, mesic Cumulic Vertic Endoaquolls
Plano	Fine-silty, mixed, superactive, mesic Typic Argiudolls
*Plano	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
*Proctor	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
Radford	Fine-silty, mixed, superactive, mesic Fluvaquentic Hapludolls
Russell	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
*Sabina	Fine, smectitic, mesic Aquic Hapludalfs
Sable	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Sawmill	Fine-silty, mixed, superactive, mesic Cumulic Endoaquolls
Senachwine	Fine-loamy, mixed, active, mesic Typic Hapludalfs
St. Charles	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Sunbury	Fine, smectitic, mesic Aquollic Hapludalfs
Tice	Fine-silty, mixed, superactive, mesic Fluvaquentic Hapludolls
Varna	Fine, illitic, mesic Oxyaquic Argiudolls
*Wyanet	Fine-loamy, mixed, active, mesic Mollic Hapludalfs
Xenia	Fine-silty, mixed, superactive, mesic Aquic Hapludalfs

CERTIFICATION STATEMENT

The MLRA Region 11 Team Leader certifies that:

a. The fieldwork activities were completed in September 2007.

b. Piatt County joins six modern soil surveys all of which are SSURGO certified.

The Piatt County update, upon SSURGO certification, will join exactly with the following update survey areas after they are recertified:

- Champaign County to the east.
  Douglas County to the southeast.
  Moultrie County to the south.
  Macon County to the west,
  DeWitt County to the northwest,
  McLean County to the north.

c. Interpretations have been coordinated and agree with adjoining survey areas.

d. The location of all typical pedons has been checked for correct location and for the soil delineations using that name. Not all typical pedons are located in Piatt County.

e. All typical pedons are classified according to Soil Taxonomy, Second Edition, 1999 and Keys to Soil Taxonomy, Tenth Edition, 2006.

f. The digital soil maps will be reviewed for accuracy and consistency.

Approval Signatures and Date

Travis Neely 2/5/09

Travis Neely — Date
MLRA Region 11 Team Leader
USDA, NRCS
Indianapolis, Indianapolis

Robert McLane 1/29/09

William J. Gradle — Date
State Conservationist acting for
USDA, NRCS
Champaign, Illinois