

United States
Department of
Agriculture

Natural Resources
Conservation Service

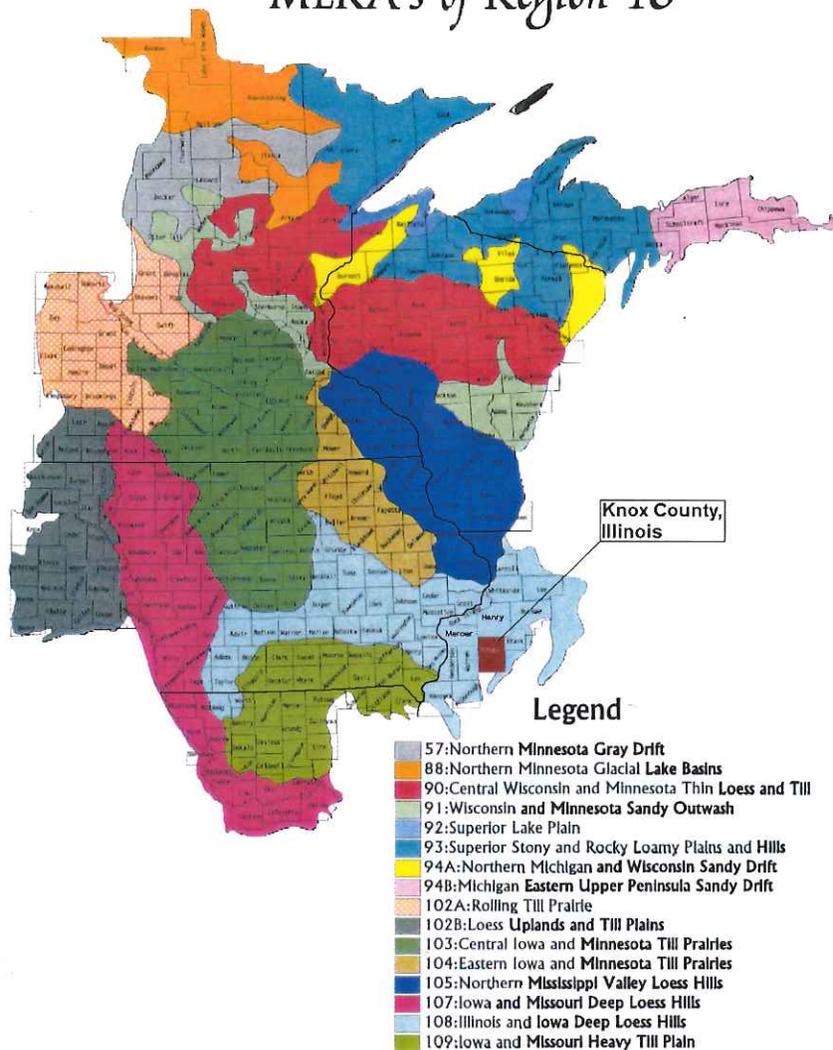
North Central Glaciated
Regional MLRA
Soil Survey Office
St. Paul, Minnesota

Classification and Correlation of Soils in Knox County, Illinois

A Subset of MLRA 108B and 115C

December 2002

MLRA's of Region 10



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UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CLASSIFICATION AND CORRELATION
OF THE SOILS OF
KNOX COUNTY, ILLINOIS
(A Subset of MLRA 108B and 115C)

prepared -- August, 2002

This recorrelation was prepared by John Doll, Soil Scientist on the Illinois State Office staff and Steve Elmer, MLRA SSPL of the Rock Falls MLRA Office. It was prepared as part of the update of Knox County, Illinois. This update is being carried out as a subset of the soil survey update of MLRA 108B in Illinois. A Legend Assistance was held in January, 2001. The Final Review and Correlation Conference is scheduled for 2003. Decisions being made during these reviews are based upon pedon data, soil correlation samples, soil maps, survey area field notes, field investigations, and field review reports. Prior to publishing this correlation, a final draft was critically reviewed by Steve Elmer, John Doll, and Tom Neuenfeldt, Soil Data Quality Specialist of MLRA Region 10. Final edits were incorporated by the Rock Falls MLRA staff in November, 2002.

Headnote for Detailed Soil Survey Legend:

Map 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 indicates that the soil is moderately eroded, and 3 indicates that it is severely eroded. Map symbols without a slope class letter are miscellaneous units.

Soil Correlation Of
Knox County, Illinois
Soil Map Legend

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded	7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded
8D2	Hickory silt loam, 10 to 15 percent slopes, eroded	8D2	Hickory silt loam, 10 to 18 percent slopes, eroded
8D2	Hickory silt loam, 10 to 18 percent slopes, eroded		
8F	Hickory silt loam, 18 to 35 percent slopes	8F	Hickory silt loam, 18 to 35 percent slopes
8E2	Hickory silt loam, 15 to 30 percent slopes, eroded	8F2	Hickory silt loam, 18 to 35 percent slopes, eroded
8F2	Hickory silt loam, 18 to 35 percent slopes, eroded		
8G	Hickory silt loam, 35 to 60 percent slopes	8G	Hickory silt loam, 35 to 60 percent slopes
8G	Hickory loam, 30 to 50 percent slopes		
17	Keomah silt loam	17A	Keomah silt loam, 0 to 2 percent slopes
17A	Keomah silt loam, 0 to 2 percent slopes		
19C3	Sylvan silty clay loam, 5 to 10 percent slopes, severely eroded	19C3	Sylvan silty clay loam, 5 to 10 percent slopes, severely eroded
19D3	Sylvan silty clay loam, 10 to 15 percent slopes, severely eroded	19D3	Sylvan silty clay loam, 10 to 18 percent slopes, severely eroded
19D3	Sylvan silty clay loam, 10 to 18 percent slopes, severely eroded		
43A	Ipava silt loam, 0 to 2 percent slopes	43A	Ipava silt loam, 0 to 2 percent slopes
43A	Ipava silt loam, 0 to 3 percent slopes		
45	Denny silt loam	45A	Denny silt loam, 0 to 2 percent slopes
45A	Denny silt loam, 0 to 2 percent slopes		
68	Sable silty clay loam	68A	Sable silty clay loam, 0 to 2 percent slopes
68A	Sable silty clay loam, 0 to 2 percent slopes		
36B	Tama silt loam, 1 to 4 percent slopes	86B	Osco silt loam, 2 to 5 percent slopes
86B	Osco silt loam, 2 to 5 percent slopes		
36B2	Tama silty clay loam, 2 to 5 percent slopes, eroded	86B2	Osco silt loam, 2 to 5 percent slopes, eroded
86B2	Osco silt loam, 2 to 5 percent slopes, eroded		
86C	Osco silt loam, 5 to 10 percent slopes	86C	Osco silt loam, 5 to 10 percent slopes
2036C	Tama-Urban land complex, 3 to 10 percent slopes		
36C2	Tama silty clay loam, 5 to 10 percent slopes, eroded	86C2	Osco silt loam, 5 to 10 percent slopes, eroded
86C2	Osco silt loam, 5 to 10 percent slopes, eroded		
36D2	Tama silty clay loam, 10 to 15 percent slopes, eroded	86D2	Osco silt loam, 10 to 18 percent slopes, eroded
86D2	Osco silt loam, 10 to 18 percent slopes, eroded		
119D2	Elco silt loam, 8 to 15 percent slopes, eroded	119D2	Elco silt loam, 10 to 18 percent slopes, eroded
119D2	Elco silt loam, 10 to 18 percent slopes, eroded		

Knox County, Illinois
Soil Map Legend

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
119E2	Elco silt loam, 15 to 20 percent slopes, eroded	119E2	Elco silt loam, 18 to 25 percent slopes, eroded
119E2	Elco silt loam, 18 to 25 percent slopes, eroded		
131B	Alvin sandy loam, 2 to 6 percent slopes	131B	Alvin sandy loam, 2 to 5 percent slopes
131B	Alvin sandy loam, 2 to 5 percent slopes		
131D	Alvin sandy loam, 10 to 18 percent slopes	131D	Alvin sandy loam, 10 to 18 percent slopes
131D	Alvin sandy loam, 8 to 15 percent slopes		
131E	Alvin sandy loam, 15 to 30 percent slopes	131F	Alvin sandy loam, 18 to 35 percent slopes
131F	Alvin sandy loam, 18 to 35 percent slopes		
134B	Camden silt loam, 2 to 5 percent slopes, moderately wet	134B	Camden silt loam, 2 to 5 percent slopes
134B	Camden silt loam, 2 to 5 percent slopes		
134C2	Camden silt loam, 5 to 10 percent slopes, eroded, moderately wet	134C2	Camden silt loam, 5 to 10 percent slopes, eroded
134C2	Camden silt loam, 5 to 10 percent slopes, eroded		
134D2	Camden silt loam, 10 to 18 percent slopes, eroded	134D2	Camden silt loam, 10 to 18 percent slopes, eroded
134D2	Camden silt loam, 10 to 18 percent slopes, eroded, moderately wet		
249	Edinburg silty clay loam	249A	Edinburg silty clay loam, 0 to 2 percent slopes
249A	Edinburg silty clay loam, 0 to 2 percent slopes		
257	Clarksdale silt loam	257A	Clarksdale silt loam, 0 to 2 percent slopes
257A	Clarksdale silt loam, 0 to 2 percent slopes		
259C2	Assumption silt loam, 5 to 10 percent slopes, eroded	259C2	Assumption silt loam, 5 to 10 percent slopes, eroded
259D2	Assumption silt loam, 10 to 15 percent slopes, eroded	259D2	Assumption silt loam, 10 to 18 percent slopes, eroded
259D2	Assumption silt loam, 10 to 18 percent slopes, eroded		
259D3	Assumption silty clay loam, 8 to 15 percent slopes, severely eroded	259D3	Assumption silty clay loam, 10 to 18 percent slopes, severely eroded
259D3	Assumption silty clay loam, 10 to 18 percent slopes, severely eroded		
279B	Rozetta silt loam, 2 to 5 percent slopes	279B	Rozetta silt loam, 2 to 5 percent slopes
279B	Rozetta silt loam, 1 to 5 percent slopes		
279C2	Rozetta silt loam, 5 to 10 percent slopes, eroded	279C2	Rozetta silt loam, 5 to 10 percent slopes, eroded
280B	Fayette silt loam, 2 to 5 percent slopes	280B	Fayette silt loam, 2 to 5 percent slopes
280C2	Fayette silt loam, 5 to 10 percent slopes, eroded	280C2	Fayette silt loam, 5 to 10 percent slopes, eroded
280D2	Fayette silt loam, 10 to 15 percent slopes, eroded	280D2	Fayette silt loam, 10 to 18 percent slopes, eroded
280D2	Fayette silt loam, 10 to 18 percent slopes, eroded		

Knox County, Illinois
Soil Map Legend

Field symbols	Field map unit name	Publication symbol	Approved map unit name
280E	Fayette silt loam, 15 to 25 percent slopes	280F	Fayette silt loam, 18 to 35 percent slopes
280F	Fayette silt loam, 18 to 35 percent slopes		
344B	Harvard silt loam, 2 to 5 percent slopes	344B	Harvard silt loam, 2 to 5 percent slopes
344B	Harvard silt loam, 1 to 5 percent slopes		
536	Dumps, mine	536	Dumps, mine
549D2	Marseilles silt loam, 10 to 15 percent slopes, eroded	549D2	Marseilles silt loam, 10 to 18 percent slopes, eroded
549D2	Marseilles silt loam, 10 to 18 percent slopes, eroded		
549E	Marseilles silt loam, 15 to 30 percent slopes	549F	Marseilles silt loam, 18 to 35 percent slopes
549F	Marseilles silt loam, 18 to 35 percent slopes		
549G	Marseilles silt loam, 30 to 60 percent slopes	549G	Marseilles silt loam, 35 to 60 percent slopes
549G	Marseilles silt loam, 35 to 60 percent slopes		
567B2	Elkhart silty clay loam, 3 to 5 percent slopes, eroded	567B2	Elkhart silty clay loam, 2 to 5 percent slopes, eroded
567B2	Elkhart silty clay loam, 2 to 5 percent slopes, eroded		
567C2	Elkhart silty clay loam, 5 to 10 percent slopes, eroded	567C2	Elkhart silty clay loam, 5 to 10 percent slopes, eroded
567D2	Elkhart silt loam, 10 to 18 percent slopes, eroded	567D2	Elkhart silt loam, 10 to 18 percent slopes, eroded
567D3	Elkhart silty clay loam, 8 to 15 percent slopes, severely eroded	567D3	Elkhart silty clay loam, 10 to 18 percent slopes, severely eroded
567D3	Elkhart silty clay loam, 10 to 18 percent slopes, severely eroded		
660C2	Coatsburg silty clay loam, 5 to 10 percent slopes, eroded	660C2	Coatsburg silty clay loam, 5 to 10 percent slopes, eroded
660C2	Coatsburg silty clay loam, 5 to 12 percent slopes, eroded		
386B	Downs silt loam, 2 to 6 percent slopes	675B	Greenbush silt loam, 2 to 5 percent slopes
675B	Greenbush silt loam, 2 to 5 percent slopes		
533	Urban land	801B	Orthents, silty, undulating
801B	Orthents, silty, undulating		
801B	Orthents, silty, gently sloping		
802B	Orthents, loamy, undulating	802B	Orthents, loamy, undulating
802B	Orthents, loamy, gently sloping		
835G	Earthen Dams	835G	Earthen dams
863	Pits, clay	863	Pits, clay
864	Pits, quarries	864	Pits, quarries
865	Pits, gravel	865	Pits, gravel
871B	Lenzburg silty clay loam, 1 to 7 percent slopes	871B	Lenzburg silty clay loam, 1 to 7 percent slopes

Knox County, Illinois
Soil Map Legend

Field symbols	Field map unit name	Publication symbol	Approved map unit name
871D 871D	Lenzburg silt loam, 10 to 20 percent slopes Lenzburg silty clay loam, 7 to 20 percent slopes	871D	Lenzburg silty clay loam, 7 to 20 percent slopes
871G 871G	Lenzburg loam, 20 to 70 percent slopes Lenzburg silty clay loam, 20 to 60 percent slopes	871G	Lenzburg silty clay loam, 20 to 60 percent slopes
872B 872B	Rapatee silty clay loam, 1 to 7 percent slopes Rapatee silty clay loam, 2 to 5 percent slopes	872B	Rapatee silty clay loam, 2 to 5 percent slopes
901B 2901B	Ipava-Osco silt loams, 2 to 5 percent slopes Ipava-Urban land-Tama complex, 1 to 5 percent slopes	901B	Ipava-Osco silt loams, 2 to 5 percent slopes
902A 2902A	Ipava-Sable complex, 0 to 2 percent slopes Ipava-Urban land-Sable complex, 0 to 3 percent slopes	902A	Ipava-Sable complex, 0 to 2 percent slopes
74 3074A	Radford silt loam Radford silt loam, 0 to 2 percent slopes, frequently flooded	3074A	Radford silt loam, 0 to 2 percent slopes, frequently flooded
107+ 3107+	Sawmill silty clay loam, overwash Sawmill silt loam, overwash, 0 to 2 percent slopes, frequently flooded	3107+	Sawmill silt loam, overwash, 0 to 2 percent slopes, frequently flooded
415 3415A	Orion silt loam Orion silt loam, 0 to 2 percent slopes, frequently flooded	3415A	Orion silt loam, 0 to 2 percent slopes, frequently flooded
451 3451A	Lawson silt loam Lawson silt loam, 0 to 2 percent slopes, frequently flooded	3451A	Lawson silt loam, 0 to 2 percent slopes, frequently flooded
81B 7081B	Littleton silt loam, 1 to 3 percent slopes Littleton silt loam, 1 to 3 percent slopes, rarely flooded	7081B	Littleton silt loam, 1 to 3 percent slopes, rarely flooded
104 7104A	Virgil silt loam Virgil silt loam, 0 to 2 percent slopes, rarely flooded	7104A	Virgil silt loam, 0 to 2 percent slopes, rarely flooded
77 8077A	Huntsville silt loam Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded	8077A	Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded
239 8239A	Dorchester silt loam Dorchester silt loam, 0 to 2 percent slopes, occasionally flooded	8239A	Dorchester silt loam, 0 to 2 percent slopes, occasionally flooded
17 9017A	Keomah silt loam Keomah silt loam, terrace, 0 to 2 percent slopes	9017A	Keomah silt loam, terrace, 0 to 2 percent slopes
36B 9086B	Tama silt loam, 1 to 4 percent slopes Osco silt loam, terrace, 2 to 5 percent slopes	9086B	Osco silt loam, terrace, 2 to 5 percent slopes
45 9257A	Denny silt loam Clarksdale silt loam, terrace, 0 to 2 percent slopes	9257A	Clarksdale silt loam, terrace, 0 to 2 percent slopes

Knox County, Illinois
Soil Map Legend

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
279B	Rozetta silt loam, 1 to 5 percent slopes	9279B	Rozetta silt loam, terrace, 2 to 5 percent slopes
9279B	Rozetta silt loam, terrace, 2 to 5 percent slopes		
279C2	Rozetta silt loam, 5 to 10 percent slopes, eroded	9279C2	Rozetta silt loam, terrace, 5 to 10 percent slopes, eroded
9279C2	Rozetta silt loam, terrace, 5 to 10 percent slopes, eroded		
280B	Fayette silt loam, 2 to 5 percent slopes	9280B	Fayette silt loam, terrace, 2 to 5 percent slopes
9280B	Fayette silt loam, terrace, 2 to 5 percent slopes		
280C2	Fayette silt loam, 5 to 10 percent slopes, eroded	9280C2	Fayette silt loam, terrace, 5 to 10 percent slopes, eroded
9280C2	Fayette silt loam, terrace, 5 to 10 percent slopes, eroded		
386B	Downs silt loam, 2 to 6 percent slopes	9675B	Greenbush silt loam, terrace, 2 to 5 percent slopes
9675B	Greenbush silt loam, terrace, 2 to 5 percent slopes		
M-W	Miscellaneous water	M-W	Miscellaneous water
W	Water	W	Water

Series Established by this Correlation: None.

Series added to the previous correlated legend: Greenbush, Osco.

Series dropped from the previous correlated legend: Downs, Tama.

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

Prior Soil Survey Publication:

Prior soil survey of Knox County, Illinois was published in 1986 as United States Department of Agriculture, Soil Survey of Knox County, Illinois

Disposition of Field Sheets:

The soil maps have been photographically reduced from a scale of 1:15840 to a scale of 1:12000 and recompiled onto 7.5' orthophotography. Compiled maps, locator maps, and field maps are in the NRCS State Office in Champaign, Illinois.

Copies of a computer tape of the digital product for Knox County will remain at the State Office, be certified for SSURGO at the Salinas Digitizing Unit, and be provided to the Knox County Board as part of the cost-share cooperative agreement.

Instructions for Map Compilation and Map Finishing:

Map recompilation is being completed by the Rock Falls MLRA staff, using the Orthomapper procedure. The compiled maps and supporting documentation are being forwarded to the NRCS Digitizing Unit in Salina, KS. Digitizing will be completed by the digitizing unit staff using the soil identification legend and the symbols legend in this document.

Symbols for map finishing will be those approved for SSURGO and as shown in this document.

Conventional and Special Symbols Legend: Only those symbols indicated on the attached NRCS-SOILS-37A (5/01) will be shown on the legend and placed on the maps.

FEATURE AND SYMBOL LEGEND FOR SOIL SURVEY

Soil Survey Area: **KNOX**
State: **ILLINOIS**

Date: **October, 2002**

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL																																																																																																																																								
SOIL SURVEY FEATURES		CULTURAL FEATURES (Optional)		HYDROGRAPHIC FEATURES (Optional)																																																																																																																																									
<p>✓ SOIL DELINEATIONS AND LABELS</p> <div style="text-align: center;"> </div> <p>STANDARD LANDFORM AND MISCELLANEOUS SURFACE FEATURES</p> <ul style="list-style-type: none"> ✓ Break escarpment ✓ Non-break escarpment Gully Levee ✓ Shot/step dikes Blowout Scoria pit Clay spot Closed depression Gravel pit Gravelly spot Landslide Lava flow ✓ Marsh or swamp Mine or quarry Miscellaneous water Perennial water Rock outcrop ✓ Saline spot ✓ Stoney spot ✓ Sandily eroded spot Sinkhole Slide or slip Soil spot Spot area Stony spot Very stony spot Wet spot 		<p>BOUNDARIES</p> <ul style="list-style-type: none"> National, state or province ✓ County or parish Municipal division Reservation (national or state forest or park) Limit of soil survey (State) and/or county/county areas ✓ Field sheet margins and overlap Public Land Survey System Section Boundary ✓ Public Land Survey System Section Corner Tick <p>TRANSPORTATION</p> <ul style="list-style-type: none"> Gravel road Normally not shown Other road Normally not shown Trail Normally not shown <p>ROAD EMBLEMS</p> <ul style="list-style-type: none"> ✓ Interstate ✓ Federal ✓ State County, town or range <p>LOCATED OBJECTS</p> <ul style="list-style-type: none"> Airport, airfield Cemetery Church Farmstead, house (small to urban areas) Light house Located object (label) Lookout tower Oil and/or natural gas well Other Prigley (label) School Soil sample site (compiled only not published) Tank (label) Windmill 		<ul style="list-style-type: none"> Drainage end (indicates direction of flow) Perennial stream Intermittent stream Grassland stream Perennial drain or irrigation ditch Intermittent drain or irrigation ditch Unclassified drain or irrigation ditch Flood plain line Spring Well artesian Well unartesian 																																																																																																																																									
<p>AD HOC FEATURES (Describe in words)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>LINE</th> <th>SURFACE</th> <th>SYMBOL</th> <th>CODE</th> <th>SYMBOL</th> <th>SYMBOL</th> </tr> </thead> <tbody> <tr><td>1</td><td>1</td><td><</td><td>---</td><td>23</td><td>⊙</td></tr> <tr><td>2</td><td>2</td><td> </td><td>---</td><td>24</td><td>⊙</td></tr> <tr><td>3</td><td>3</td><td>□</td><td>---</td><td>25</td><td>⊙</td></tr> <tr><td>4</td><td>4</td><td>⊠</td><td>✓ D. S. P.</td><td>26</td><td>⊙</td></tr> <tr><td>5</td><td>5</td><td>∇</td><td>---</td><td>27</td><td>⊙</td></tr> <tr><td>6</td><td>6</td><td>X</td><td>---</td><td>28</td><td>⊙</td></tr> <tr><td>7</td><td>7</td><td>⊞</td><td>C. S. P.</td><td>29</td><td>⊞</td></tr> <tr><td>8</td><td>8</td><td>⊞</td><td>---</td><td>30</td><td>⊞</td></tr> <tr><td>9</td><td>9</td><td>⊞</td><td>---</td><td>31</td><td>⊞</td></tr> <tr><td>10</td><td>10</td><td>⊞</td><td>---</td><td>32</td><td>⊞</td></tr> <tr><td>11</td><td>11</td><td>⊞</td><td>---</td><td>33</td><td>⊞</td></tr> <tr><td>12</td><td>12</td><td>∇</td><td>---</td><td>34</td><td>⊞</td></tr> <tr><td>13</td><td>13</td><td>∇</td><td>---</td><td>35</td><td>⊞</td></tr> <tr><td>14</td><td>14</td><td>*</td><td>---</td><td>36</td><td>+</td></tr> <tr><td>15</td><td>15</td><td>⊞</td><td>---</td><td>37</td><td>+</td></tr> <tr><td>16</td><td>16</td><td>▲</td><td>---</td><td>38</td><td>+</td></tr> <tr><td>17</td><td>17</td><td>⊞</td><td>---</td><td>39</td><td>+</td></tr> <tr><td>18</td><td>18</td><td>*</td><td>GLA</td><td>40</td><td>+</td></tr> <tr><td>19</td><td>19</td><td>X</td><td>---</td><td>41</td><td>+</td></tr> <tr><td>20</td><td>20</td><td>∇</td><td>---</td><td>42</td><td>+</td></tr> <tr><td>21</td><td>21</td><td>⊞</td><td>---</td><td>43</td><td>+</td></tr> <tr><td>22</td><td>22</td><td>⊞</td><td>---</td><td>44</td><td>+</td></tr> </tbody> </table>		LINE	SURFACE	SYMBOL	CODE	SYMBOL	SYMBOL	1	1	<	---	23	⊙	2	2		---	24	⊙	3	3	□	---	25	⊙	4	4	⊠	✓ D. S. P.	26	⊙	5	5	∇	---	27	⊙	6	6	X	---	28	⊙	7	7	⊞	C. S. P.	29	⊞	8	8	⊞	---	30	⊞	9	9	⊞	---	31	⊞	10	10	⊞	---	32	⊞	11	11	⊞	---	33	⊞	12	12	∇	---	34	⊞	13	13	∇	---	35	⊞	14	14	*	---	36	+	15	15	⊞	---	37	+	16	16	▲	---	38	+	17	17	⊞	---	39	+	18	18	*	GLA	40	+	19	19	X	---	41	+	20	20	∇	---	42	+	21	21	⊞	---	43	+	22	22	⊞	---	44	+		
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DEFINITIONS OF SPECIAL FEATURES:

Label:	Name:	Major-Minor Code:	Feature Definition:
ESO	Escarpment, nonbedrock	900-206	A relatively continuous and steep slope or cliff generally produced by erosion, but can be produced by faulting breaking the continuity of more gently sloping land surfaces. Exposed non-bedrock material is non-soil or very shallow, poorly developed soil.
MAR	Marsh or swamp	905-111	A water saturated, very poorly drained area, intermittently or permanently water-covered. Marsh areas are dominantly covered by sedges, cattails, and rushes. Swamps are dominantly covered by trees and shrubs. Typically 1/4 to 2 acres.
SAN	Sandy spot	900-313	Surface layer with sand content greater than 75 percent in areas where the surface layer of the named soils of the surrounding map unit have less than about 25 percent sand. Typically 1/4 to 2 acres.
ERO	Severely eroded spot	900-314	An area where on the average 75 percent or more of the original surface layer has been lost from accelerated erosion. Typically 1/4 to 2 acres.
SLP	Short, steep slope	900-203	Narrow soil area that has slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.
GSP	Gray soil spot	998-26	Areas where the surface layer is mixed with a light colored subsurface layer exposed on the surface, where the surrounding soils do not contain a light colored subsurface layer. These soils are in poorly drained depressions. Typically 1/4 to 2 acres.

Knox County, Illinois
Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name.)

Map symbol	Soil name
17A	Keomah silt loam, 0 to 2 percent slopes (Prime farmland if drained)
43A	Ipava silt loam, 0 to 2 percent slopes
45A	Denny silt loam, 0 to 2 percent slopes (Prime farmland if drained)
68A	Sable silty clay loam, 0 to 2 percent slopes (Prime farmland if drained)
86B	Osco silt loam, 2 to 5 percent slopes
86B2	Osco silt loam, 2 to 5 percent slopes, eroded
131B	Alvin sandy loam, 2 to 5 percent slopes
134B	Camden silt loam, 2 to 5 percent slopes
249A	Edinburg silty clay loam, 0 to 2 percent slopes (Prime farmland if drained)
257A	Clarksdale silt loam, 0 to 2 percent slopes (Prime farmland if drained)
279B	Rozetta silt loam, 2 to 5 percent slopes
280B	Fayette silt loam, 2 to 5 percent slopes
344B	Harvard silt loam, 2 to 5 percent slopes
567B2	Elkhart silty clay loam, 2 to 5 percent slopes, eroded
675B	Greenbush silt loam, 2 to 5 percent slopes
871B	Lenzburg silty clay loam, 1 to 7 percent slopes
872B	Rapatee silty clay loam, 2 to 5 percent slopes
3074A	Radford silt loam, 0 to 2 percent slopes, frequently flooded (Prime farmland if protected from flooding or not frequently flooded during the growing season)
3107+	Sawmill silt loam, overwash, 0 to 2 percent slopes, frequently flooded (Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season)
3415A	Orion silt loam, 0 to 2 percent slopes, frequently flooded (Prime farmland if protected from flooding or not frequently flooded during the growing season)
3451A	Lawson silt loam, 0 to 2 percent slopes, frequently flooded (Prime farmland if protected from flooding or not frequently flooded during the growing season)
7081B	Littleton silt loam, 1 to 3 percent slopes, rarely flooded
7104A	Virgil silt loam, 0 to 2 percent slopes, rarely flooded (Prime farmland if drained)
8077A	Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded
8239A	Dorchester silt loam, 0 to 2 percent slopes, occasionally flooded
9017A	Keomah silt loam, terrace, 0 to 2 percent slopes (Prime farmland if drained)
9086B	Osco silt loam, terrace, 2 to 5 percent slopes
9257A	Clarksdale silt loam, terrace, 0 to 2 percent slopes (Prime farmland if drained)
9279B	Rozetta silt loam, terrace, 2 to 5 percent slopes
9280B	Fayette silt loam, terrace, 2 to 5 percent slopes
9675B	Greenbush silt loam, terrace, 2 to 5 percent slopes

Soil Mapunit Symbol Conversion Legend
Knox County, Illinois

Field symbols ⁽¹⁾	Publication symbol
7D3	7D3
8D2	8D2
8D2	8D2
8E2	8F2
8F	8F
8F2	8F2
8G	8G
17	17A
17	9017A (2)
17A	17A
19C3	19C3
19D3	19D3
36B	86B
36B	9086B (2)
36B2	86B2
36C2	86C2
36D2	86D2
43A	43A
45	45A
45	9257A (2)
68	68A
68A	68A
74	3074A
77	8077A
81B	7081B
86B	86B
86B2	86B2
86C	86C
86C2	86C2
86D2	86D2
104	7104A
107+	3107+
119D2	119D2
119D2	119D2
119E2	119E2
131B	131B
131D	131D
131E	131F

Field symbols ⁽¹⁾	Publication symbol
134B	134B
134C2	134C2
134D2	134D2
239	8239A
249	249A
249A	249A
257	257A
257A	257A
259C2	259C2
259D2	259D2
259D3	259D3
279B	279B
279B	9279B (2)
279C2	279C2
279C2	9279C2 (2)
280B	280B
280B	9280B (2)
280C2	280C2
280C2	9280C2 (2)
280D2	280D2
280E	280F
280F	280F
344B	344B
3451A	3451A
386B	675B
386B	9675B (2)
415	3415A
451	3451A
45A	45A
533	801B
536	536
549D2	549D2
549E	549F
549F	549F
549G	549G
567B2	567B2
567C2	567C2

Field symbols ⁽¹⁾	Publication symbol
567D2	567D2
567D3	567D3
660C2	660C2
675B	675B
801B	801B
802B	802B
835G	835G
863	863
864	864
865	865
871B	871B
871D	871D
871G	871G
872B	872B
901B	901B
902A	902A
2036C	86C
2901B	901B
2902A	902A
3074A	3074A
3107+	3107+
3415A	3415A
7081B	7081B
7104A	7104A
8077A	8077A
8239A	8239A
9017A	9017A
9086B	9086B
9257A	9257A
9279B	9279B
9279C2	9279C2
9280B	9280B
9280C2	9280C2
9675B	9675B
M-W	M-W (3)
W	W

- (1) Current publication symbols and symbols from 1986 published soil survey legend.
- (2) Terrace landscape position phase.
- (3) Recently established Miscellaneous water map unit for sewage lagoons.

SOIL LEGEND ACCORDING TO ALPHABETICAL SEQUENCE

<u>Map symbol</u>	<u>Soil name</u>
131B	Alvin sandy loam, 2 to 5 percent slopes
131D	Alvin sandy loam, 10 to 18 percent slopes
131F	Alvin sandy loam, 18 to 35 percent slopes
259C2	Assumption silt loam, 5 to 10 percent slopes, eroded
259D2	Assumption silt loam, 10 to 18 percent slopes, eroded
259D3	Assumption silty clay loam, 10 to 18 percent slopes, severely eroded
7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded
134B	Camden silt loam, 2 to 5 percent slopes
134C2	Camden silt loam, 5 to 10 percent slopes, eroded
134D2	Camden silt loam, 10 to 18 percent slopes, eroded
257A	Clarksdale silt loam, 0 to 2 percent slopes
9257A	Clarksdale silt loam, terrace, 0 to 2 percent slopes
660C2	Coatsburg silty clay loam, 5 to 10 percent slopes, eroded
45A	Denny silt loam, 0 to 2 percent slopes
8239A	Dorchester silt loam, 0 to 2 percent slopes, occasionally flooded
536	Dumps, mine
835G	Earthen Dams
249A	Edinburg silty clay loam, 0 to 2 percent slopes
119D2	Elco silt loam, 10 to 18 percent slopes, eroded
119E2	Elco silt loam, 18 to 25 percent slopes, eroded
567D2	Elkhart silt loam, 10 to 18 percent slopes, eroded
567B2	Elkhart silty clay loam, 2 to 5 percent slopes, eroded
567C2	Elkhart silty clay loam, 5 to 10 percent slopes, eroded
567D3	Elkhart silty clay loam, 10 to 18 percent slopes, severely eroded
280B	Fayette silt loam, 2 to 5 percent slopes
280C2	Fayette silt loam, 5 to 10 percent slopes, eroded
280D2	Fayette silt loam, 10 to 18 percent slopes, eroded
280F	Fayette silt loam, 18 to 35 percent slopes
9280B	Fayette silt loam, terrace, 2 to 5 percent slopes
9280C2	Fayette silt loam, terrace, 5 to 10 percent slopes, eroded
675B	Greenbush silt loam, 2 to 5 percent slopes
9675B	Greenbush silt loam, terrace, 2 to 5 percent slopes
344B	Harvard silt loam, 2 to 5 percent slopes
8D2	Hickory silt loam, 10 to 18 percent slopes, eroded
8F	Hickory silt loam, 18 to 35 percent slopes
8F2	Hickory silt loam, 18 to 35 percent slopes, eroded
8G	Hickory silt loam, 35 to 60 percent slopes
8077A	Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded
43A	Ipava silt loam, 0 to 2 percent slopes
901B	Ipava-Osco silt loams, 2 to 5 percent slopes
902A	Ipava-Sable complex, 0 to 2 percent slopes
17A	Keomah silt loam, 0 to 2 percent slopes
9017A	Keomah silt loam, terrace, 0 to 2 percent slopes
3451A	Lawson silt loam, 0 to 2 percent slopes, frequently flooded
871B	Lenzburg silty clay loam, 1 to 7 percent slopes
871D	Lenzburg silty clay loam, 7 to 20 percent slopes
871G	Lenzburg silty clay loam, 20 to 60 percent slopes
7081B	Littleton silt loam, 1 to 3 percent slopes, rarely flooded
549D2	Marseilles silt loam, 10 to 18 percent slopes, eroded
549F	Marseilles silt loam, 18 to 35 percent slopes
549G	Marseilles silt loam, 35 to 60 percent slopes
M-W	Miscellaneous water
3415A	Orion silt loam, 0 to 2 percent slopes, frequently flooded

<u>Map symbol</u>	<u>Soil name</u>
802B	Orthents, loamy, undulating
801B	Orthents, silty, undulating
86B	Oscosilt loam, 2 to 5 percent slopes
86B2	Oscosilt loam, 2 to 5 percent slopes, eroded
86C	Oscosilt loam, 5 to 10 percent slopes
86C2	Oscosilt loam, 5 to 10 percent slopes, eroded
86D2	Oscosilt loam, 10 to 18 percent slopes, eroded
9086B	Oscosilt loam, terrace, 2 to 5 percent slopes
863	Pits, clay
865	Pits, gravel
864	Pits, quarries
3074A	Radford silt loam, 0 to 2 percent slopes, frequently flooded
872B	Rapatee silty clay loam, 2 to 5 percent slopes
279B	Rozetta silt loam, 2 to 5 percent slopes
279C2	Rozetta silt loam, 5 to 10 percent slopes, eroded
9279B	Rozetta silt loam, terrace, 2 to 5 percent slopes
9279C2	Rozetta silt loam, terrace, 5 to 10 percent slopes, eroded
68A	Sable silty clay loam, 0 to 2 percent slopes
3107+	Sawmill silt loam, overwash, 0 to 2 percent slopes, frequently flooded
19C3	Sylvan silty clay loam, 5 to 10 percent slopes, severely eroded
19D3	Sylvan silty clay loam, 10 to 18 percent slopes, severely eroded
7104A	Virgil silt loam, 0 to 2 percent slopes, rarely flooded
W	Water

**Notes to Accompany
Classification and Correlation
Of the Soils of
Knox County, Illinois**

By John Doll and Steve Elmer

ALVIN SERIES

No comment.

ASSUMPTION SERIES

These soils are taxadjuncts because the dark surface layer is thinner than typical for the series. This difference does not significantly affect the use and management of the soils. These soils classify as Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs.

ATLAS SERIES

No comment.

CAMDEN SERIES

These soils in Knox County were previously correlated with a seasonal high water table at 4 to 6 feet. During the update, this was correlated to greater than 6 feet, to join with adjacent counties and others within the MLRA.

CLARKSDALE SERIES

A terrace phase map unit (9257A) has been added to the legend with this update.

COATSBURG SERIES

No comment.

DENNY SERIES

A few small areas of Denny soils on terraces are correlated to the Clarksdale terrace unit (9257A).

DORCHESTER SERIES

Transects confirm the absence of both carbonates and a buried surface layer within 60 inches in many polygons.

EDINBURG SERIES

No comments.

ELCO SERIES

No comments.

ELKHART SERIES

These soils in Map units 567B2, 567C2, and 567D3 are taxadjuncts because the dark surface layer is thinner than typical for the series. This difference does not significantly affect the use and management of the soils. These soils classify as Fine-silty, mixed, superactive, mesic Mollic Hapludalfs.

The OSD concept was recently changed from water table greater than 6 feet to water table greater than 4 feet. This is being applied to these soils in Knox County as well.

FAYETTE SERIES

Two terrace phase units (9280B and 9280C2) are added to the legend with this update.

GREENBUSH SERIES

This recently established series replaces the Downs, moderately wet, in northwestern Illinois. One terrace phase unit (9675B) has been added to the legend with this update.

HARVARD SERIES

No comment.

HICKORY SERIES

An 8F map unit is added to the legend for join with Warren County.

HUNTSVILLE SERIES

The series type location is from Knox County.

IPIVA SERIES

The series type location is from Knox County.

KEOMAH SERIES

These soils have calcium carbonates in the upper part of the C horizon, which is not typical for the series. One terrace phase unit (9017A) has been added to the legend with this update.

LAWSON SERIES

No comment.

LENZBURG SERIES

No comment.

LITTLETON SERIES

These soils are on positions adjacent to floodplains and are subject to rare flooding.

MARSEILLES SERIES

No comment.

ORION SERIES

These soils in Knox County were previously correlated as taxadjuncts to the series because it was felt that they dominantly contained more than 18 percent clay in the control section. Field investigations in Knox County and surrounding update survey areas verify the presence of pedons that are fine-silty rather than coarse-silty. However, over the extent of the MLRA, the dominant situation is that these soils are within the series concept, i.e. coarse-silty. The fine-silty pedons are often associated with areas where the buried soil is within a depth of 30 inches. These soils in Knox County are no longer considered to be taxadjuncts for correlation purposes, but are, in fact, within the normal distribution of the clay range for the series as it occurs within the

~~MLRA, which is not typical for the series. This difference does not affect the use and management of the soils. They classify as Fine-silty, mixed, superactive, nonacid, mesic Aquic Udifluvents~~

ORTHENTS

No comment.

OSCO SERIES

This series replaces the Tama, moderately wet, in Northwestern Illinois. These soils in map units 86B2, 86C2, and 86D2 are taxadjuncts because the dark surface layer is thinner than typical for the series. This difference does not affect use and management of the soils. They classify as Fine-silty, mixed, superactive, mesic Mollic Hapludalfs. One terrace phase unit (9086B) has been added to the legend with this update.

RADFORD SERIES

No comment.

RAPATEE SERIES

The series type location is from Knox County.

ROZETTA SERIES

Two terrace phase units (9279B and 9279C2) are added to the legend with this update.

SABLE SERIES

No comment.

SAWMILL SERIES

No comment.

SYLVAN SERIES

No comment.

VIRGIL SERIES

These soils are on low-lying positions in or adjacent to stream floodplains and are subject to rare flooding in the county.

Classification of the Soils

(A single asterisk indicates that this component in all map units in the survey area is a taxadjunct to the series. A double asterisk indicates that this component in only some map units in the survey area is 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
Alvin-----	Coarse-loamy, mixed, superactive, mesic Typic HapludalFs
*Assumption--	Fine-silty, mixed, superactive, mesic Oxyaquic Argiudolls
Atlas-----	Fine, smectitic, mesic Aeric Chromic Vertic Epiqualfs
Camden-----	Fine-silty, mixed, superactive, mesic Typic HapludalFs
Clarksdale--	Fine, smectitic, mesic Udollic Endoqualfs
Coatsburg---	Fine, smectitic, mesic Vertic Argiaquolls
Denny-----	Fine, smectitic, mesic Mollic Albaqualfs
Dorchester--	Fine-silty, mixed, superactive, calcareous, mesic Typic Udifluents
Edinburg----	Fine, smectitic, mesic Vertic Argiaquolls
Elco-----	Fine-silty, mixed, superactive, mesic Oxyaquic HapludalFs
**Elkhart----	Fine-silty, mixed, superactive, mesic Typic Argiudolls
Fayette-----	Fine-silty, mixed, superactive, mesic Typic HapludalFs
Greenbush---	Fine-silty, mixed, superactive, mesic Mollic HapludalFs
Harvard-----	Fine-silty, mixed, superactive, mesic Mollic HapludalFs
Hickory-----	Fine-loamy, mixed, active, mesic Typic HapludalFs
Huntsville--	Fine-silty, mixed, superactive, mesic Cumulic Hapludolls
Ipava-----	Fine, smectitic, mesic Aquic Argiudolls
Keomah-----	Fine, smectitic, mesic Aeric Endoqualfs
Lawson-----	Fine-silty, mixed, superactive, mesic Aquic Cumulic Hapludolls
Lenzburg----	Fine-loamy, mixed, active, calcareous, mesic Haplic Udarents
Littleton---	Fine-silty, mixed, superactive, mesic Aquic Cumulic Hapludolls
Marseilles---	Fine-silty, mixed, active, mesic Typic HapludalFs
Orion-----	Coarse-silty, mixed, superactive, nonacid, mesic Aquic Udifluents
Orthents----	Fine-loamy, mixed, active, nonacid, mesic Typic Udorthents
Orthents----	Fine-silty, mixed, nonacid, mesic Aquic Udorthents
**Osco-----	Fine-silty, mixed, superactive, mesic Typic Argiudolls
Radford-----	Fine-silty, mixed, superactive, mesic Fluvaquentic Hapludolls
Rapatee-----	Fine-silty, mixed, superactive, nonacid, mesic Mollic Udarents
Rozetta-----	Fine-silty, mixed, superactive, mesic Typic HapludalFs
Sable-----	Fine-silty, mixed, superactive, mesic Typic Endoquolls
Sawmill-----	Fine-silty, mixed, superactive, mesic Cumulic Endoquolls
Sylvan-----	Fine-silty, mixed, superactive, mesic Typic HapludalFs
Virgil-----	Fine-silty, mixed, superactive, mesic Udollic Endoqualfs

Certification Statement:

The MO Leader certifies that:

1. This soil survey update joins adjacent survey areas as follows:

Warren County	Update survey in progress	exact join
Mercer County	Update survey in progress	exact join
Fulton County	Update survey in progress	exact join
Henry County	Update survey in progress	exact join
Peoria County	Published modern survey	acceptable join
Stark County	Published modern survey	acceptable join

An exact join with Peoria County and Stark County will be accomplished when those survey areas are updated.

New names and symbols were added and some names and symbols were deleted. All changes agree with the MLRA 108 soil identification legend.

2. Interpretations are being coordinated with adjoining survey areas. The manuscript will be generated using the MUG (map unit generator) program, therefore, the text and tables should be consistent with the NASIS data. Exceptions to perfect agreement between the NASIS data and the manuscript will be as noted in this Correlation Memorandum.

3. The location of all series typical pedons has been checked for correct location and for the soil delineations using that name. Series typical pedons are those that represent the soils in MLRA 108. Not all typical pedons are located in Knox County. A list of map unit symbols and location of a representative mapping unit in MLRA 108 will be published in the soil survey report.

4. All publication symbols will be those shown as approved in the conversion legend of the Correlation Memorandum.

5. All typifying pedons used for classification are accurately classified according to Soil Taxonomy.

Approved Signatures and Date:

Joseph W. McCloskey (Date)
Region 10 Team Leader

William J. Gradle (Date)
State Conservationist