

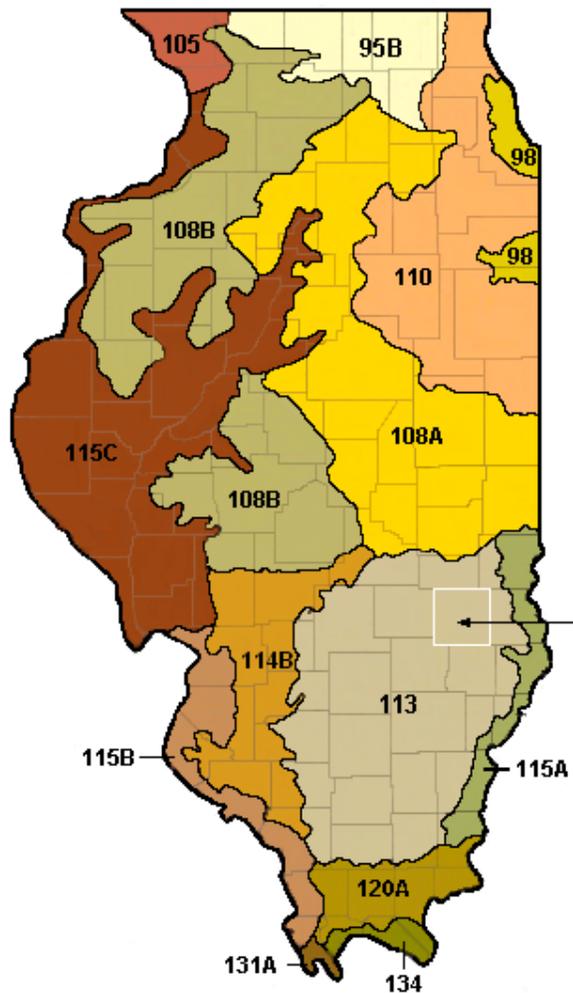
United States
Department of
Agriculture

Natural Resources
Conservation Service

East Central Glaciated
Regional MLRA
Soil Survey Office
Indianapolis, IN

Classification and Correlation of Soils in Jasper County, Illinois

A Subset of MLRA 113
November 2005



**Jasper
County**

LEGEND

- 95B - Southern Wisconsin and Northern Illinois Drift Plain
- 98 - Southern Michigan and Northern Indiana Drift Plain
- 105 - Northern Mississippi Valley Loess Hills
- 108A and B - Illinois and Iowa Deep Loess and Drift
- 110 - Northern Illinois and Indiana Heavy Till Plain
- 113 - Central Claypan Area
- 114B - Southern Illinois and Indiana Thin Loess and Till Plain
- 115A, B, and C - Central Mississippi Valley Wooded Slopes
- 120A - Kentucky and Indiana Sandstone and Shale Hills and Valleys
- 131A - Southern Mississippi Valley Alluvium
- 134 - Southern Mississippi Valley Silty Uplands

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

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

A SUBSET OF MLRA 113

November 2005

This correlation amendment was prepared by Zach Weber, MLRA Soil Scientist, Charleston, IL, John C. Doll, Soil Scientist, Champaign, IL, and Asghar A. Chowdhery, Soil Data Quality Specialist (SDQS) MLRA Region 11 team, Indianapolis, IN. Initial review of this amendment was done November 16-17, 2004. It was prepared as part of the update of the Soil Survey of Jasper 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 Jasper County, Illinois" – October 1986, and the published "Soil Survey of Jasper County, Illinois" – June 1992.

HEADNOTE FOR DETAILED SOIL SURVEY LEGEND

This update of Jasper 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. 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
Jasper 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 3B	Hoyleton silt loam, 0 to 2 percent slopes Hoyleton silt loam, 1 to 3 percent slopes	3A	Hoyleton silt loam, 0 to 2 percent slopes
3B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded	3B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded
4B	Richview silt loam, 2 to 5 percent slopes	4B	Richview silt loam, 2 to 5 percent slopes
4C2	Richview silt loam, 5 to 10 percent slopes, eroded	4C2	Richview silt loam, 5 to 10 percent slopes, eroded
7C2	Atlas silt loam, 5 to 10 percent slopes, eroded	7C2	Atlas 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
7D2	Atlas silt loam, 10 to 18 percent slopes, eroded	7D2	Atlas silt loam, 10 to 18 percent slopes, eroded
7D2	Atlas silt loam, 10 to 15 percent slopes, eroded		
7D3	Atlas silty clay loam, 10 to 15 percent slopes, severely eroded	7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded
7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded		
8F 8F 8F2 8G	Hickory silt loam, 18 to 35 percent slopes Hickory loam, 15 to 30 percent slopes Hickory loam, 15 to 30 percent slopes, eroded Hickory loam, 30 to 60 percent slopes	8F	Hickory silt loam, 18 to 35 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
13B2	Bluford silt loam, 2 to 5 percent slopes, eroded	13B2	Bluford silt loam, 2 to 5 percent slopes, eroded
14B 14B	Ava silt loam, 1 to 5 percent slopes Ava silt loam, 2 to 5 percent slopes	14B	Ava silt loam, 2 to 5 percent slopes
14C2	Ava silt loam, 5 to 10 percent slopes, eroded	14C2	Ava silt loam, 5 to 10 percent slopes, eroded

Field symbols	Field map unit name	Publication symbol	Approved map unit name
48 48A	Ebbert silt loam Ebbert silt loam, 0 to 2 percent slopes	48A	Ebbert silt loam, 0 to 2 percent slopes
109 109A	Racoon silt loam Racoon silt loam, 0 to 2 percent slopes	109A	Racoon silt loam, 0 to 2 percent slopes
131B 131B	Alvin fine sandy loam, 1 to 5 percent slopes Alvin fine sandy loam, 2 to 5 percent slopes	131B	Alvin fine sandy loam, 2 to 5 percent slopes
131C2 131C2	Alvin fine sandy loam, 5 to 10 percent slopes, eroded Alvin fine sandy loam, 5 to 12 percent slopes, eroded	131C2	Alvin fine sandy loam, 5 to 10 percent slopes, eroded
131D2 131E2	Alvin fine sandy loam, 10 to 18 percent slopes, eroded Alvin fine sandy loam, 12 to 25 percent slopes, eroded	131D2	Alvin fine sandy loam, 10 to 18 percent slopes, eroded
131E2 131F	Alvin fine sandy loam, 12 to 25 percent slopes, eroded Alvin fine sandy loam, 18 to 35 percent slopes	131F	Alvin fine sandy loam, 18 to 35 percent slopes
138 138A	Shiloh silty clay loam Shiloh silty clay loam, 0 to 2 percent slopes	138A	Shiloh silty clay loam, 0 to 2 percent slopes
178 178A	Ruark fine sandy loam Ruark fine sandy loam, 0 to 2 percent slopes	178A	Ruark fine sandy loam, 0 to 2 percent slopes
184 184A	Roby fine sandy loam Roby fine sandy loam, 0 to 2 percent slopes	184A	Roby fine sandy loam, 0 to 2 percent slopes
212B 212B	Thebes loam, 2 to 5 percent slopes Thebes silt loam, 1 to 5 percent slopes	212B	Thebes loam, 2 to 5 percent slopes
212C2 212C2	Thebes silt loam, 5 to 10 percent slopes, eroded Thebes loam, 5 to 10 percent slopes, eroded	212C2	Thebes loam, 5 to 10 percent slopes, eroded
218 218A	Newberry silt loam Newberry silt loam, 0 to 2 percent slopes	218A	Newberry silt loam, 0 to 2 percent slopes
533	Urban land	533	Urban land
581B2 581B2	Tamalco silt loam, 1 to 5 percent slopes, eroded Tamalco silt loam, 2 to 5 percent slopes, eroded	581B2	Tamalco silt loam, 2 to 5 percent slopes, eroded
620B2	Darmstadt silt loam, 2 to 5 percent slopes, eroded	620B2	Darmstadt silt loam, 2 to 5 percent slopes, eroded
779D 779D	Chelsea loamy fine sand, 7 to 18 percent slopes Chelsea loamy fine sand, 10 to 18 percent slopes	779D	Chelsea loamy fine sand, 10 to 18 percent slopes

Field symbols	Field map unit name	Publication symbol	Approved map unit name
805C	Orthents, clayey, sloping	805C	Orthents, clayey, sloping
866	Dumps, slurry	866	Dumps, slurry
620A 912A	Darmstadt silt loam, 0 to 2 percent slopes Hoyleton-Darmstadt silt loams, 0 to 2 percent slopes	912A	Hoyleton-Darmstadt silt loams, 0 to 2 percent slopes
8F 8F2 946D2	Hickory loam, 15 to 30 percent slopes Hickory loam, 15 to 30 percent slopes, eroded Hickory-Atlas silt loams, 10 to 18 percent slopes, eroded	946D2	Hickory-Atlas silt loams, 10 to 18 percent slopes, eroded
967F 967F 967G	Hickory-Gosport complex, 18 to 30 percent slopes Hickory-Gosport silt loams, 18 to 35 percent slopes Hickory-Gosport complex, 30 to 60 percent slopes	967F	Hickory-Gosport silt loams, 18 to 35 percent slopes
2 120 991 991A	Cisne silt loam Huey silt loam Cisne-Huey silt loams Cisne-Huey silt loams, 0 to 2 percent slopes	991A	Cisne-Huey silt loams, 0 to 2 percent slopes
3071A 3071	Darwin silty clay, 0 to 2 percent slopes, frequently flooded Darwin silty clay, frequently flooded	3071A	Darwin silty clay, 0 to 2 percent slopes, frequently flooded
3288A 3288	Petrolia silty clay loam, 0 to 2 percent slopes, frequently flooded Petrolia silty clay loam, frequently flooded	3288A	Petrolia silty clay loam, 0 to 2 percent slopes, frequently flooded
3304A 3304	Landes fine sandy loam, 0 to 2 percent slopes, frequently flooded Landes fine sandy loam, frequently flooded	3304A	Landes fine sandy loam, 0 to 2 percent slopes, frequently flooded
3331 3331A	Haymond silt loam, frequently flooded Haymond silt loam, 0 to 2 percent slopes, frequently flooded	3331A	Haymond silt loam, 0 to 2 percent slopes, frequently flooded
3333 3333A	Wakeland silt loam, frequently flooded Wakeland silt loam, 0 to 2 percent slopes, frequently flooded	3333A	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded
424 3424A	Shoals silt loam Shoals silt loam, 0 to 2 percent slopes, frequently flooded	3424A	Shoals silt loam, 0 to 2 percent slopes, frequently flooded
7071 7071A	Darwin silty clay, rarely flooded Darwin silty clay, 0 to 2 percent slopes, rarely flooded	7071A	Darwin silty clay, 0 to 2 percent slopes, rarely flooded
7288 7288A	Petrolia silty clay loam, rarely flooded Petrolia silty clay loam, 0 to 2 percent slopes, rarely flooded	7288A	Petrolia silty clay loam, 0 to 2 percent slopes, rarely flooded

Field symbols	Field map unit name	Publication symbol	Approved map unit name
7304 7304A	Landes fine sandy loam, rarely flooded Landes fine sandy loam, 0 to 2 percent slopes, rarely flooded	7304A	Landes fine sandy loam, 0 to 2 percent slopes, rarely flooded
7331 7331A	Haymond silt loam, rarely flooded Haymond silt loam, 0 to 2 percent slopes, rarely flooded	7331A	Haymond silt loam, 0 to 2 percent slopes, rarely flooded
7333 7333A	Wakeland silt loam, rarely flooded Wakeland silt loam, 0 to 2 percent slopes, rarely flooded	7333A	Wakeland silt loam, 0 to 2 percent slopes, rarely flooded
109 8109A	Racoon silt loam Racoon silt loam, 0 to 2 percent slopes, occasionally flooded	8109A	Racoon silt loam, 0 to 2 percent slopes, occasionally flooded
424 8424A	Shoals silt loam Shoals silt loam, 0 to 2 percent slopes, occasionally flooded	8424A	Shoals 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 (October 1986): Miscellaneous Water

Series dropped from the previously correlated legend (October 1986): None

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

The last soil survey of Jasper County was completed in 1986 and was published by the United States Department of Agriculture, Natural Resources Conservation Service in 1992. It is Illinois Agricultural Experiment Station Soil Report No. 136, "Soil Survey of Jasper County, Illinois". Reference to the prior soil survey will be included in the literature citation of the manuscript. This update replaces the 1992 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: Jasper County joins six modern soil surveys. These are Clark, Clay, Crawford, Cumberland, Effingham, and Richland Counties in Illinois. Clark County to the north was published in 1979. Clay County to the southwest was published in 1998. Crawford County to the east was published in 1996. Cumberland County to the north was published in 2002. Effingham County to the west was published in 1991. Richland County to the south was published in 1972. An acceptable join exists with all adjoining counties. An exact join will be completed with these counties as they are updated to the MLRA legend.

Disposition of field sheets: The publication soil map materials used for Soil Report No. 136 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 Kansas Digitizing Center for digitizing. The final SSURGO certified product will be available at the Soil Datamart, the NRCS state office, and will be provided to the Jasper 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 placed on the maps.

FEATURE AND SYMBOL LEGEND FOR SOIL SURVEY

SOIL SURVEY FEATURES

SOIL DELINEATIONS AND LABELS	
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STANDARD LANDFORM AND MISCELLANEOUS SURFACE FEATURES

Non-bedrock escarpment	^ ^ ^ ^ ^ ^ ^ ^ ^ ^
Levee	
Short steep slope
Closed depression	↓
Gravel pit	X
Marsh or swamp	~ ~ ~ ~ ~
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)

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

State	○
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LOCATED OBJECTS: NONE

HYDROGRAPHIC FEATURES (Optional): NONE

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

LABEL	NAME	DESCRIPTION OR FEATURE
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 ½ 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 eroded, severely eroded, very severely eroded, or gullied. Typically ¼ to 1 acre.
ESO	Escarpment, nonbedrock	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 ¼ to 1 acre.
LVS	Levee	An embankment that confines or controls water, especially one built along the banks of a river to prevent overflow of lowlands.
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 ½ to 2 acres.
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 acre.
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 3 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 3 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 ½ acres.

Soil Mapunit Symbol Conversion Legend
Jasper County, Illinois

Field symbols	Publication symbol
8F	8F
8F	946D2
8F2	8F
8F2	946D2
8G	8F
7C2	7C2
7C3	7C3
7D2	7D2
7D3	7D3
2	2A
2	991A
2A	2A
3A	3A
3B	3A
3B2	3B2
48	48A
48A	48A
4B	4B
4C2	4C2
13A	13A
13B2	13B2
14B	14B
14C2	14C2
12	12A
12A	12A
109	109A
109	8109A
109A	109A
120	991A
131B	131B

131C2	131C2
131D2	131D2
131E2	131D2
131E2	131F
131F	131F
138	138A
138A	138A
178	178A
178A	178A
184	184A
184A	184A
212B	212B
212C2	212C2
218	218A
218A	218A
424	3424A
424	8424A
533	533
581B2	581B2
620A	912A
620B2	620B2
779D	779D
805C	805C
866	866
912A	912A
946D2	946D2
967F	967F
967G	967F
991	991A
991A	991A
3071	3071A

Field symbols	Publication symbol
3071A	3071A
3288	3288A
3288A	3288A
3304	3304A
3304A	3304A
3331	3331A
3331A	3331A
3333	3333A
3333A	3333A
3424A	3424A
7071	7071A
7071A	7071A
7288	7288A
7288A	7288A
7304	7304A
7304A	7304A
7331	7331A
7331A	7331A
7333	7333A
7333A	7333A
8109A	8109A
8424A	8424A
M-W	M-W
W	M-W
W	W

Soil Identification Legend According to Alphabetical Sequence

Map symbol	Approved map unit name
131B	Alvin fine sandy loam, 2 to 5 percent slopes
131C2	Alvin fine sandy loam, 5 to 10 percent slopes, eroded
131D2	Alvin fine sandy loam, 10 to 18 percent slopes, eroded
131F	Alvin fine sandy loam, 18 to 35 percent slopes
7C2	Atlas silt loam, 5 to 10 percent slopes, eroded
7C3	Atlas silty clay loam, 5 to 10 percent slopes, severely eroded
7D2	Atlas silt loam, 10 to 18 percent slopes, eroded
7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded
14B	Ava silt loam, 2 to 5 percent slopes
14C2	Ava silt loam, 5 to 10 percent slopes, eroded
13A	Bluford silt loam, 0 to 2 percent slopes
13B2	Bluford silt loam, 2 to 5 percent slopes, eroded
779D	Chelsea loamy fine sand, 10 to 18 percent slopes
2A	Cisne silt loam, 0 to 2 percent slopes
991A	Cisne-Huey silt loams, 0 to 2 percent slopes
620B2	Darmstadt silt loam, 2 to 5 percent slopes, eroded
3071A	Darwin silty clay, 0 to 2 percent slopes, frequently flooded
7071A	Darwin silty clay, 0 to 2 percent slopes, rarely flooded
866	Dumps, slurry
48A	Ebbert silt loam, 0 to 2 percent slopes
3331A	Haymond silt loam, 0 to 2 percent slopes, frequently flooded
7331A	Haymond silt loam, 0 to 2 percent slopes, rarely flooded
8F	Hickory silt loam, 18 to 35 percent slopes
946D2	Hickory-Atlas silt loams, 10 to 18 percent slopes, eroded
967F	Hickory-Gosport silt loams, 18 to 35 percent slopes
3A	Hoyleton silt loam, 0 to 2 percent slopes
3B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded
912A	Hoyleton-Darmstadt silt loams, 0 to 2 percent slopes

Map symbol	Approved map unit name
3304A	Landes fine sandy loam, 0 to 2 percent slopes, frequently flooded
7304A	Landes fine sandy loam, 0 to 2 percent slopes, rarely flooded
M-W	Miscellaneous water
218A	Newberry silt loam, 0 to 2 percent slopes
805C	Orthents, clayey, sloping
3288A	Petrolia silty clay loam, 0 to 2 percent slopes, frequently flooded
7288A	Petrolia silty clay loam, 0 to 2 percent slopes, rarely flooded
109A	Racoon silt loam, 0 to 2 percent slopes
8109A	Racoon silt loam, 0 to 2 percent slopes, occasionally flooded
4B	Richview silt loam, 2 to 5 percent slopes
4C2	Richview silt loam, 5 to 10 percent slopes, eroded
184A	Roby fine sandy loam, 0 to 2 percent slopes
178A	Ruark fine sandy loam, 0 to 2 percent slopes
138A	Shiloh silty clay loam, 0 to 2 percent slopes
3424A	Shoals silt loam, 0 to 2 percent slopes, frequently flooded
8424A	Shoals silt loam, 0 to 2 percent slopes, occasionally flooded
581B2	Tamalco silt loam, 2 to 5 percent slopes, eroded
212B	Thebes loam, 2 to 5 percent slopes
212C2	Thebes loam, 5 to 10 percent slopes, eroded
533	Urban land
3333A	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded
7333A	Wakeland silt loam, 0 to 2 percent slopes, rarely flooded
W	Water
12A	Wynoose silt loam, 0 to 2 percent slopes

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
3B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded
4B	Richview silt loam, 2 to 5 percent slopes
4C2	Richview silt loam, 5 to 10 percent slopes, eroded
7C2	Atlas silt loam, 5 to 10 percent slopes, eroded
7C3	Atlas silty clay loam, 5 to 10 percent slopes, severely eroded
7D2	Atlas silt loam, 10 to 18 percent slopes, eroded
7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded
8F	Hickory silt loam, 18 to 35 percent slopes
12A	Wynoose silt loam, 0 to 2 percent slopes
13A	Bluford silt loam, 0 to 2 percent slopes
13B2	Bluford silt loam, 2 to 5 percent slopes, eroded
14B	Ava silt loam, 2 to 5 percent slopes
14C2	Ava silt loam, 5 to 10 percent slopes, eroded
48A	Ebbert silt loam, 0 to 2 percent slopes
109A	Racoon silt loam, 0 to 2 percent slopes
131B	Alvin fine sandy loam, 2 to 5 percent slopes
131C2	Alvin fine sandy loam, 5 to 10 percent slopes, eroded
131D2	Alvin fine sandy loam, 10 to 18 percent slopes, eroded
131F	Alvin fine sandy loam, 18 to 35 percent slopes
138A	Shiloh silty clay loam, 0 to 2 percent slopes
178A	Ruark fine sandy loam, 0 to 2 percent slopes
184A	Roby fine sandy loam, 0 to 2 percent slopes
212B	Thebes loam, 2 to 5 percent slopes
212C2	Thebes loam, 5 to 10 percent slopes, eroded
218A	Newberry silt loam, 0 to 2 percent slopes
533	Urban land
581B2	Tamalco silt loam, 2 to 5 percent slopes, eroded

Map symbol	Approved map unit name
620B2	Darmstadt silt loam, 2 to 5 percent slopes, eroded
779D	Chelsea loamy fine sand, 10 to 18 percent slopes
805C	Orthents, clayey, sloping
866	Dumps, slurry
912A	Hoyleton-Darmstadt silt loams, 0 to 2 percent slopes
946D2	Hickory-Atlas silt loams, 10 to 18 percent slopes, eroded
967F	Hickory-Gosport silt loams, 18 to 35 percent slopes
991A	Cisne-Huey silt loams, 0 to 2 percent slopes
3071A	Darwin silty clay, 0 to 2 percent slopes, frequently flooded
3288A	Petrolia silty clay loam, 0 to 2 percent slopes, frequently flooded
3304A	Landes fine sandy loam, 0 to 2 percent slopes, frequently flooded
3331A	Haymond silt loam, 0 to 2 percent slopes, frequently flooded
3333A	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded
3424A	Shoals silt loam, 0 to 2 percent slopes, frequently flooded
7071A	Darwin silty clay, 0 to 2 percent slopes, rarely flooded
7288A	Petrolia silty clay loam, 0 to 2 percent slopes, rarely flooded
7304A	Landes fine sandy loam, 0 to 2 percent slopes, rarely flooded
7331A	Haymond silt loam, 0 to 2 percent slopes, rarely flooded
7333A	Wakeland silt loam, 0 to 2 percent slopes, rarely flooded
8109A	Racoon silt loam, 0 to 2 percent slopes, occasionally flooded
8424A	Shoals silt loam, 0 to 2 percent slopes, occasionally flooded
M-W	Miscellaneous water
W	Water

**CLASSIFICATION OF PEDONS
SAMPLED FOR LABORATORY ANALYSIS
JASPER 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>Approved Series Name or Classification</u>
Blair	83IL-079-020	7C2	Blair*
Hoyleton	82IL-079-021	3A	Hoyleton
Racoon	83IL-079-053	109A	Racoon
Thebes	84IL-079-088	212A	Thebes
Petrolia	84IL-079-027	7288A	Petrolia
Bloomfield	84IL-079-075	779D	Chelsea
Huey	83IL-079-015	991A	Huey
Shiloh	83IL-079-006	138A	Shiloh
Atlas	84IL-079-064	7C2	Atlas taxadjunct
Wakeland	84IL-079-063	3333A	Fine-silty, mixed, superactive, nonacid, mesic Aeric Fluvaquents*
Darmstadt	84IL-079-029	912A	Darmstadt
Cisne	85IL-079-001	2A	Cisne

*inclusion in mapunit

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>Approved Series Name or Classification</u>
Alvin	82IL-079-015	131B	Alvin
Atlas	83IL-079-020	7C2	Blair*
Atlas	83IL-079-047	7D3	Fine-loamy, smectitic, mesic Typic Endoaqualfs*
Belknap	83IL-079-027		
Birds	83IL-079-033	3288A	Fine-silty, mixed, superactive, nonacid, mesic Typic Fluvaquents*
Blair	82IL-079-026	7C2	Atlas taxadjunct
Bonnie	83IL-079-042	3288A	Petrolia
Cisne	59IL-079-001		
Cisne	82IL-079-008	2A	Cisne
Darmstadt	82IL-079-016	912A	Darmstadt
Darmstadt	83IL-079-057	620B2	Darmstadt
Darwin	82IL-079-023		
Haymond	82IL-079-010	3331A	Haymond
Huey	58IL-079-001		
Huey	63IL-079-001		
Huey	82IL-079-003	991A	Huey
Newberry	83IL-079-056	218A	Newberry
Petrolia	82IL-079-025	7288A	Petrolia
Petrolia	82IL-079-027	7288A	Petrolia
Petrolia	83IL-079-063	3288A	Petrolia
Racoon	83IL-079-053	109A	Racoon
Ruark	82IL-079-022	178A	Ruark
Ruark	83IL-079-039	178A	Ruark

<u>Sampled As</u>	<u>Lab Number</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Tamalco	83IL-079-021	581B2	Tamalco
Tamalco	83IL-079-034	581B2	Tamalco
Thebes	84IL-079-088	212A	Thebes
Wakeland	82IL-079-006	3333A	Wakeland
Wakeland	83IL-079-029	3333A	Coarse-silty, mixed, superactive, nonacid, mesic Typic Fluvaquents*
Wakeland	83IL-079-046	3333A	Wakeland
Wakeland	83IL-079-050	3333A	Wakeland
Wynoose	82IL-079-014	12A	Wynoose
Zipp	83IL-079-064	7071A	Zipp*

*inclusion in mapunit

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

<u>Sampled As</u>	<u>Lab Number</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Bloomfield	84IL-079-075	779D	Chelsea
Darmstadt	84IL-079-029	912A	Darmstadt
Hoyleton	82IL-079-021	3A	Hoyleton
Huey	83IL-079-015	991A	Huey
Petrolia	84IL-079-027	7288A	Petrolia
Racoon	82IL-079-021	109A	Racoon
Shiloh	83IL-079-006	138A	Shiloh

**Notes to accompany the
Classification and Correlation
of the Soils in
Jasper County, Illinois
Prepared by Zach Weber**

ALVIN SERIES- Previously correlated in Illinois Agricultural Experiment Station Report No. 136. 131E2 (12 to 25 percent slopes) correlates to 131D2 (10 to 18 percent slopes) and 131F (18 to 35 percent slopes). 131B DMU# 153448; 131C2 DMU# 462989; 131D2 DMU# 155235; 131F DMU# 462981.

ATLAS SERIES- Previously correlated in Soil Report No. 136. Atlas soils in Jasper County are taxadjuncts to the series because they do not have vertic properties. Moderately eroded Atlas soils classify as Fine, smectitic, mesic Aquic Hapludalfs. Severely eroded Atlas soils classify as Fine, smectitic, mesic Aeric Endoaqualfs. 7C2 DMU# 463163; 7C3 DMU# 463164; 7D2 DMU# 463165; 7D3 DMU# 494646.

AVA SERIES- Previously correlated in Soil Report No. 136. 14B DMU# 155488; 14C2 DMU# 155489.

BLUFORD SERIES- Previously correlated in Soil Report No. 136. 13A DMU# 155486; 13B2 DMU# 493989.

CHELSEA SERIES- Previously correlated in Soil Report No. 136. Few, small, old sand pits are included in Chelsea map units. 779D DMU# 497716.

CISNE SERIES- Previously correlated in Soil Report No. 136. This is the type location for the series. Some areas are mapped in complex with Huey silt loam. 2A DMU# 155381; 991A DMU# 496838.

DARMSTADT SERIES- Previously correlated in Soil Report No. 136. Darmstadt soils on 0 to 2 percent slopes are mapped in complex with Hoyleton silt loam. Studies have shown sodium affected soils to be a complex with unaffected soils. Brief field investigation in the county verified this. Neighboring counties have also mapped the complex. 620B2 DMU# 494652; 912A DMU# 459623.

DARWIN SERIES- Previously correlated in Soil Report No. 136. Mapped as frequently flooded phase and rarely flooded phase. 3071A DMU# 466013; 7071A DMU# 494552.

DUMPS, SLURRY- Previously correlated in Soil Report No. 136. This map unit is in an area of ash and washings from the coal-fired public utilities plant near Newton Lake. 866 DMU# 142191.

EBBERT SERIES- Previously correlated in Soil Report No. 136. 48A DMU# 489440.

GOSPORT SERIES- Previously correlated in Soil Report No. 136 as 967F and 967G Hickory-Gosport complexes. Hickory-Gosport 967G (30 to 60 percent slopes) correlates to Hickory-Gosport 967F (18 to 35 percent slopes). 967F DMU# 497832.

HAYMOND SERIES- Previously correlated in Soil Report No. 136. Mapped as frequently flooded phase and rarely flooded phase. 3331A DMU# 465505; 7331A DMU# 494555.

HICKORY SERIES- Previously correlated in Soil Report No. 136. The manuscript typical pedon in Jasper County had a loam surface. Transects indicated that majority of map units have a silt loam

surface. Hickory soils on slopes less than 18 percent are mapped in complex with Atlas silt loam. 8F2 correlates to 8F Hickory silt loam and 946D2 Hickory-Atlas silt loams. 8G (30 to 60 percent slopes) correlates to 8F (18 to 35 percent slopes). 8F DMU# 140215; 946D2 DMU# 463166.

HOYLETON SERIES- Previously correlated in Soil Report No. 136. 3B (1 to 3 percent slopes) correlates to 3A (0 to 2 percent slopes). 3A DMU# 155382; 3B2 DMU# 494624.

HUEY SERIES- Previously correlated in Soil Report No. 136. Huey soils are mapped in complex with Cisne. 120A Huey silt loam correlates to 991A Cisne-Huey silt loams. 991A DMU# 496838.

LANDES SERIES- Previously correlated in Soil Report No. 136. Mapped as frequently flooded phase and rarely flooded phase. 3304A DMU# 155163; 7304A DMU# 494554.

MISCELLANEOUS WATER- Previously identified water. M-W DMU# 155361.

NEWBERRY SERIES- Previously correlated in Soil Report No. 136. 218A DMU# 155517.

ORTHENTS, CLAYEY, SLOPING- Previously correlated in Soil Report No. 136. These soils are dominantly in areas near the coal-fired public utilities complex at Newton Lake. 805C DMU# 498375.

PETROLIA SERIES- Previously correlated in Soil Report No. 136. Mapped as frequently flooded phase and rarely flooded phase. 3288A DMU# 465504; 7288A DMU# 494553.

RACCOON SERIES- Previously correlated in Soil Report No. 136. The soils in this survey area have layers in the control section that have reaction values that are in the upper end of the extremely acid range. These values are slightly lower than typical for the Racoon series but do not have a detrimental effect on the use and management of these soils. Some areas on alluvial fans and low stream terraces are occasionally flooded. 109A DMU# 492895; 8109A DMU# 497618.

RICHVIEW SERIES- Previously correlated in Soil Report No. 136. The soils in the eroded 4C2 map unit have grayer colors in the subsoil than defined for the series. 4B DMU# 493459; 4C2 DMU# 487758.

ROBY SERIES- Previously correlated in Soil Report No. 136. 184A DMU# 465985.

RUARK SERIES- Previously correlated in Soil Report No. 136. Some Ruark soils have higher reaction than defined for series. 178A DMU# 155513.

SHILOH SERIES- Previously correlated in Soil Report No. 136. 138A DMU# 464247.

SHOALS SERIES- Previously correlated in Soil Report No. 136. 424 correlates to 3424A Shoals silt loam, frequently flooded and 8424A Shoals silt loam, occasionally flooded on the alluvial fan positions as well as one levee protected area. Included are soils with pH values lower than described for the series. 3424A DMU# 140780; 8424A DMU# 496794.

TAMALCO SERIES- Previously correlated in Soil Report No. 136. Solum is thinner in these soils than defined for series. Propose to extend solum thickness range to 30-60". 581B2 DMU# 496238.

THEBES SERIES- Previously correlated in Soil Report No. 136 as a taxadjunct – fine-silty over sandy or sandy-skeletal, mixed, mesic Typic Hapludalfs. Review of pedon descriptions indicated that the soils classify as Fine-loamy, mixed, superactive, mesic Typic Hapludalfs and are taxadjunct to the series. 212B DMU# 494697; 212C2 DMU# 494726.

URBAN LAND- Previously correlated in Soil Report No. 136. 533 DMU# 151935.

WAKELAND SERIES- Previously correlated in Soil Report No. 136. Mapped as frequently flooded phase and rarely flooded phase. 3333A DMU # 465506; 7333A DMU# 494556.

WATER- Previously correlated, but not shown in the legend, in Soil Report No. 136. W DMU# 155171.

WYNOOSE SERIES- Previously correlated in Soil Report No. 136. 12A DMU# 155485.

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
Alvin-----	Coarse-loamy, mixed, superactive, mesic Typic Hapludalfs
*Atlas-----	Fine, smectitic, mesic Aquic Hapludalfs
*Atlas-----	Fine, smectitic, mesic Aeric Endoaqualfs
Ava-----	Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs
Bluford-----	Fine, smectitic, mesic Aeric Fragic Endoaqualfs
Chelsea-----	Mixed, mesic Lamellic Udipsamments
Cisne-----	Fine, smectitic, mesic Mollic Albaqualfs
Darmstadt---	Fine-silty, mixed, superactive, mesic Aquic Natrudalfs
Darwin-----	Fine, smectitic, mesic Fluvaquentic Vertic Endoaquolls
Ebbert-----	Fine-silty, mixed, superactive, mesic Argiaquic Argialbolls
Gosport-----	Fine, illitic, mesic Oxyaquic Dystrudepts
Haymond-----	Coarse-silty, mixed, superactive, mesic Dystric Fluventic Eutrudepts
Hickory-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Hoyleton----	Fine, smectitic, mesic Aquollic Hapludalfs
Huey-----	Fine-silty, mixed, superactive, mesic Typic Natraqualfs
Landes-----	Coarse-loamy, mixed, superactive, mesic Fluventic Hapludolls
Newberry----	Fine-silty, mixed, superactive, mesic Mollic Endoaqualfs
Orthents----	Fine, mixed, mesic Udorthents
Petrolia----	Fine-silty, mixed, superactive, nonacid, mesic Fluvaquentic Endoaquepts
Racoon-----	Fine-silty, mixed, superactive, mesic Typic Endoaqualfs
Richview----	Fine-silty, mixed, superactive, mesic Mollic Oxyaquic Hapludalfs
Roby-----	Coarse-loamy, mixed, superactive, mesic Aquic Hapludalfs
Ruark-----	Fine-loamy, mixed, active, mesic Typic Endoaqualfs
Shiloh-----	Fine, smectitic, mesic Cumulic Vertic Endoaquolls
Shoals-----	Fine-loamy, mixed, superactive, nonacid mesic Fluventic Endoaquepts
Tamalco-----	Fine, smectitic, mesic Typic Natrudalfs
*Thebes-----	Fine-loamy, mixed, superactive, mesic Typic Hapludalfs
Wakeland----	Coarse-silty, mixed, superactive, nonacid, mesic Aeric Fluvaquents
Wynoose-----	Fine, smectitic, mesic Typic Albaqualfs

CERTIFICATION STATEMENT

The MLRA Region 11 Team Leader certifies that:

- a. The fieldwork activities were completed in November 2004.
- b. Jasper County joins exactly with the following survey areas:

Crawford County to the east - SSURGO certified

Jasper County joins acceptably with the following survey areas:

Clark County to the north - published 1979; currently being updated
Clay County to the southwest - published 1998.
Cumberland County to the north - published 2002.
Effingham County to the west - published in 1991.
Richland County to the south - published in 1972.

An exact join will be completed when these counties are updated to the MLRA legend.

- 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 Jasper County.
- e. All typical pedons are classified according to Keys of Soil Taxonomy, ninth edition, 2003.
- f. The digital soil maps will be reviewed for accuracy and consistency.

Approval Signatures and Date

Travis Neely
MLRA Region 11 Team Leader
Indianapolis, IN 46278

Date

William J. Gradle
State Conservationist
Champaign, IL 61821

Date