

UNITED
STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CLASSIFICATION AND CORRELATION
OF THE SOILS OF
FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS

A SUBSET OF MLRA'S 113 AND 114

This correlation was prepared by John C. Doll in December 1995 and updated by Gary R. Struben in March 1997. It was prepared as part of the update of the Soil Survey of Franklin and Jefferson Counties, Illinois. Prior to publishing this correlation a draft of this correlation was critically reviewed by David E. Preloger, Project Leader for the soil survey. A Final Field review was held in August 1994. Decisions made then were based on pedon data, soil correlation samples, soil maps, survey area field notes, and field review reports. The preliminary correlation document was reviewed by Carl L. Glocker at the National Soil Survey Center in March 1995.

Headnote for Detailed Soil Survey Legend:

Map symbols consist of numbers, or 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. Symbols without a slope letter are for nearly level soils. A final number of 2 following the slope letter indicates that the soil is moderately eroded, and 3 indicates that it is severely eroded.

SOIL CORRELATION OF
FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS

Field symbols	Field map unit name	Publication symbol	Approved map unit name
1, 1A0, 2, 2A0	Cisne silt loam	2	Cisne silt loam
3A, 3A0, 3B, 3B0, 912A	Hoyleton silt loam, 0 to 2 percent slopes	3A	Hoyleton silt loam, 0 to 2 percent slopes
3B1, 3B2, 3C, 3C2, 912B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded	3B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded
4B2, 4B1, 4B, 4	Richview silt loam, 2 to 5 percent slopes, eroded	4B2	Richview silt loam, 2 to 5 percent slopes, eroded
4C2, 4C1, 4C	Richview silt loam, 5 to 10 percent slopes, eroded	4C2	Richview silt loam, 5 to 10 percent slopes, eroded
5C2	Blair silt loam, 5 to 10 percent slopes, eroded	5C2	Blair silt loam, 5 to 10 percent slopes, eroded
5C3, 3C3, 5C, 5D1, 5D2, 5D3, 13C3, 927C3, 34C3, 34D1, 34D2, 34D3	Blair silty clay loam, 5 to 10 percent slopes, severely eroded	5C3	Blair silty clay loam, 5 to 10 percent slopes, severely eroded
7C2	Atlas silt loam, 5 to 10 percent slopes, eroded	7C2	Atlas silt loam, 5 to 10 percent slopes, eroded
7D2	Atlas silt loam, 10 to 18 percent slopes, eroded	7D2	Atlas silt loam, 10 to 18 percent slopes, eroded
8D2, 8D, 308D2	Hickory silt loam, 10 to 18 percent slopes, eroded	8D2	Hickory silt loam, 10 to 18 percent slopes, eroded

FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
8D3, 8E2, 8E3, 15bE1, 15bE2, 15bE3, 46D1, 46D2, 46D3, 46E1, 46E2, 46E3, 421D, 421D2, 421D3, 425D, 425D3, 814D2, 814D3, 814E, 814E2, 814E3, 850D3, 900D3, 908D3	Hickory clay loam, 10 to 18 percent slopes, severely eroded	8D3	Hickory clay loam, 10 to 18 percent slopes, severely eroded
8F	Hickory silt loam, 18 to 35 percent slopes	8F	Hickory silt loam, 18 to 35 percent slopes
8G	Hickory silt loam, 35 to 60 percent slopes	8G	Hickory silt loam, 35 to 60 percent slopes
10C, 4C3, 8C3, 10C3, 14C3, 15bC3, 15bD3, 46C1, 46C2, 46C3, 814, 814A, 814C3, 814D, 814D2, 850C2, 850D, 929C, 929C2, 929C3, 929D	Plumfield silty clay loam, 5 to 10 percent slopes	10C	Plumfield silty clay loam, 5 to 10 percent slopes
10D, 10D3, 14D3, 814D3, 814E, 814E2, 814E3, 929D3	Plumfield silty clay loam, 10 to 18 percent slopes	10D	Plumfield silty clay loam, 10 to 18 percent slopes
12, 11, 11A0, 12A0, 35, 37, 120, 120A0, 120A1, 120A2, 991	Wynoose silt loam	12	Wynoose silt loam
13A, 13A0, 13A1, 13B, 14A, 34A0, 34A1, 34B0, 34B1, 620A	Bluford silt loam, 0 to 2 percent slopes	13A	Bluford silt loam, 0 to 2 percent slopes

FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
13B2, 5B, 5B2, 13B1, 13C, 13C2, 34B2, 34B3, 34C1, 34C2, 620B2	Bluford silt loam, 2 to 5 percent slopes, eroded	13B2	Bluford silt loam, 2 to 5 percent slopes, eroded
14B, 15bB0, 15bB1	Ava silt loam, 2 to 5 percent slopes	14B	Ava silt loam, 2 to 5 percent slopes
14B2, 581B2, 15bB2, 15bB3, V581	Ava silt loam, 2 to 5 percent slopes, eroded	14B2	Ava silt loam, 2 to 5 percent slopes, eroded
14C2, 14C, 14D, 14D2, 814C2, 15bC1, 15bC2, 15bD1, 15bD2	Ava silt loam, 5 to 10 percent slopes, eroded	14C2	Ava silt loam, 5 to 10 percent slopes, eroded
15D3, 15D, 15D2, 15E, 15E2, 15E3, 15aE1, 15aE2, 15aE3, 583D, 583D3	Parke silty clay loam, 10 to 18 percent slopes, severely eroded	15D3	Parke silty clay loam, 10 to 18 percent slopes, severely eroded
84, 49A0, 84A1, 84A2, 26, 26A0, 401, 524, 524A0, 7084	Okaw silt loam	84	Okaw silt loam
109, 109A0, 1109, 35a	Racoon silt loam	109	Racoon silt loam
122B, 122A, 122B0, 338B, 523B, 523B1, 49B0, 49B1	Colp silt loam, 2 to 5 percent slopes	122B	Colp silt loam, 2 to 5 percent slopes
122B2, 122C2, 467C2	Colp silt loam, 2 to 5 percent slopes, eroded	122B2	Colp silt loam, 2 to 5 percent slopes, eroded

FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
122C3, 122D, 122D1, 122D2, 338C2, 338C3	Colp silty clay loam, 5 to 10 percent slopes, severely eroded	122C3	Colp silty clay loam, 5 to 10 percent slopes, severely eroded
122D3, 122E1, 122E2, 122E3, 122F2, 122F3, 122G2, 122G3	Colp silty clay loam, 10 to 18 percent slopes, severely eroded	122D3	Colp silty clay loam, 10 to 18 percent slopes, severely eroded
287	Chauncey silt loam	287	Chauncey silt loam
301B, 214B, 335, 335A, 301B1, 301B2	Grantsburg silt loam, 2 to 5 percent slopes	301B	Grantsburg silt loam, 2 to 5 percent slopes
301C3, 214C2, 214C3, 215D2, 301C, 301C2, 340C3, 301D, 339C, 339C3, 339D, 339D2, 47C3, 340C, 47C2, 340C2, 340C1, 339D3, 340D, 340D2	Grantsburg silty clay loam, 5 to 10 percent slopes, severely eroded	301C3	Grantsburg silty clay loam, 5 to 10 percent slopes, severely eroded
337A, 167, 167A, 337, 167B0, 167B1, 337B1, 337B0, 34a	Creal silt loam, 0 to 2 percent slopes	337A	Creal silt loam, 0 to 2 percent slopes
338A, 338, 338A0, 523A, 523A1, 49A1	Hurst silt loam, 0 to 2 percent slopes	338A	Hurst silt loam, 0 to 2 percent slopes
339D, 339E	Wellston silt loam, 10 to 18 percent slopes	339D	Wellston silt loam, 10 to 18 percent slopes

FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
340D3, 301D2, 301D3, 47E1, 339E3, 339E2, R339E, 340E, 340E2, 340E3, 47E2, 47E3, 339D3, 340D, 340D2, 47D1, 47D2, 47D3	Zanesville silty clay loam, 10 to 18 percent slopes, severely eroded	340D3	Zanesville silty clay loam, 10 to 18 percent slopes, severely eroded
376, T2	Cisne silt loam, bench	376	Cisne silt loam, bench
377A, T3A, 391	Hoyleton silt loam, 0 to 2 percent slopes, bench	377A	Hoyleton silt loam, bench, 0 to 2 percent slopes
377B2, T3B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded, bench phase	377B2	Hoyleton silt loam, bench, 2 to 5 percent slopes, eroded
421G, 339G, 339F3, R339G, 786G, 761F, 908G, 8G2, 8G3, 900G, 425G, 425G2, 425G3, 47G1, 47G2, 47G3, 46G1, 46G2, 761G	Kell silt loam, 35 to 60 percent slopes	421G	Kell silt loam, 35 to 60 percent slopes
518B, T14B	Rend silt loam, 2 to 5 percent slopes	518B	Rend silt loam, 2 to 5 percent slopes
518B2, T13B2, 640B2, 169B	Rend silt loam, 2 to percent slopes, eroded	518B2	Rend silt loam, 2 to 5 percent slopes, eroded
518C2, T14C2	Rend silt loam, 5 to 10 percent slopes, eroded,	518C2	Rend silt loam, 5 to 10 percent slopes, eroded,
533	Urban land	533	Urban land

FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
536	Dumps, mine	536	Dumps, mine
551D2	Gosport loam, 10 to 18 percent slopes, eroded	551D2	Gosport loam, 10 to 18 percent slopes, eroded
583B, 15A0, 15B, 15B1, 15B2, 15aB0, 15aB1, 15aB2, 15	Pike silt loam, 2 to 5 percent slopes	583B	Pike silt loam, 2 to 5 percent slopes
583C2, 15C, 15C2, 15C3, 583C3, 15aC2, 15aC3, 15aD1, 15aD2, 15aD3	Pike silt loam, 5 to 10 percent slopes, eroded	583C2	Pike silt loam, 5 to 10 percent slopes, eroded
639, 168, 390, T12	Wynoose silt loam, bench	639	Wynoose silt loam, bench
640A, T13A, 391, 169	Bluford silt loam, 0 to 2 percent slopes, bench	640A	Bluford silt loam, bench, 0 to 2 percent slopes
786D2	Frondorf silt loam, 10 to 18 percent slopes, eroded	786D2	Frondorf silt loam, 10 to 18 percent slopes, eroded
802B, 801, 802	Orthents, loamy, undulating	802B	Orthents, loamy, undulating
802F, 803F	Orthents, loamy, hilly and very hilly	802F	Orthents, loamy, hilly and very hilly
823B, 825C, 871B, 823A	Schuline silt loam, 2 to 5 percent slopes	823B	Schuline silt loam, 2 to 5 percent slopes
866	Dumps, slurry	866	Dumps, slurry
871D, 823D	Lenzburg gravelly silty clay loam, 7 to 20 percent slopes	871D	Lenzburg gravelly silty clay loam, 7 to 20 percent slopes
871G	Lenzburg gravelly silty clay loam, 20 to 60 percent slopes	871G	Lenzburg gravelly silty clay loam, 20 to 60 percent slopes

FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
908F, 8E, 8F, 8F1, 8F2, 8F3, 8F4, 908E, R339E, 46F1, 421E, 421E3, 425E2, 425E3, 425F2, 425F3, 786D, 786D3, 786E, 786E3, 900E, 900E3, 945E, 908E2, 46F2, 47F2, 47F3, 46F3, R399F	Hickory-Frondorf complex, 18 to 30 percent slopes	908F	Hickory-Kell silt loams, 18 to 35 percent slopes
927D3, 5D, 5D2, 5D3, 5E, 5E2, 5E3, 7D, 7D2, 7D3, 605D3, 605E, 605E3, 34D4, 34E2, 34E3	Blair-Atlas complex, 10 to 18 percent slopes, severely eroded	927D3	Blair-Atlas silty clay loams, 10 to 18 percent slopes, severely eroded
1085, 4085, W85, W426, 1426, 59W, 1422, 4420, 4422, W422,	Jacob silty clay, undrained, frequently flooded	1085	Jacob silty clay, undrained, frequently flooded
1108, W108, 4108, 4334	Bonnie silt loam, undrained, frequently flooded	1108	Bonnie silt loam, undrained, frequently flooded
3072, 72, 427, 72A0, 54	Sharon silt loam, frequently flooded	3072	Sharon silt loam, frequently flooded
3085, 59, 426, 426A, 426A0, 525, 85, 85A0 71, 71A, 71A0	Jacob silty clay, frequently flooded	3085	Jacob silty clay, frequently flooded
3108, 108, 108+, M108, 108A0, 58	Bonnie silt loam, frequently flooded	3108	Bonnie silt loam, frequently flooded

FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
3226	Wirt silt loam, frequently flooded	3226	Wirt silt loam, frequently flooded
3336	Wilbur silt loam, frequently flooded	3336	Wilbur silt loam, frequently flooded
3382, 382, 382A0, 787, 63, 86, 386, 787A, 8382	Belknap silt loam, frequently flooded	3382	Belknap silt loam, frequently flooded
3415	Orion silt loam, frequently flooded	3415	Orion silt loam, frequently flooded
3422, 3420, 422, 420, 422A, 422A0, 70, 70A, 70A0	Cape silty clay loam, frequently flooded	3422	Cape silty clay loam, frequently flooded
W, W<40	Water less than 40 acres	W	Water less than 40 acres
WATER, W>40	Water greater than 40 acres	WATER	Water greater than 40 acres

Series Established by this Correlation and County of Type Location:

Rend (Franklin Co)

Plumfield (Franklin Co.)

Kell (Jefferson Co.). This correlation reactivates the Kell Series.

Series Dropped or Made Inactive: None

Verification of Exact Cooperator Names:

For the front cover, general soil map, 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 Franklin County and Jefferson County Soil and Water Conservation Districts. Financial assistance was made available by the Franklin and Jefferson County Boards and the Illinois Department of Agriculture. This soil survey is Illinois Agricultural Experiment Station Soil Report No. 168."

Prior Soil Survey Publication: There are no previous detailed soil surveys published for either Franklin or Jefferson Counties. In Franklin County, a soil association map with limited interpretations and soil descriptions was published in 1971. *General Soil Map and Report of the Franklin County Soil and Water Conservation District*, C. C. Miles and W. A. Morris; Call Publishing Co., duQuoin, Illinois; October 1971; 21 pp.

This survey joins with other published soil survey maps in the region (MLRA 113 and MLRA 114). The soil information for Franklin County part of the survey area has been compiled onto 7.5' topographic quadrangle sheets for use in future geographic information systems.

Disposition of Field Sheets:

The soil maps have been compiled at a scale of 1:15,840. Compiled maps, locater maps, and field maps are in the NRCS state office in Champaign, Illinois. Franklin County compiled sheets on 7.5' topographic quads are also in the NRCS state office in Champaign.

Copies of a computer tape of the digital product for Franklin County will remain at the state office, be certified for SSURGO at NCC, and be provided to the Franklin County Board as part of the cost share cooperative agreement.

Instructions for Map Compilation and Map Finishing:

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

Divided roads, other roads and railroads will be labeled, but not drafted on the compiled soil maps.

Areas defined as subsided areas will be labeled and outlined using the "other boundary".

Large dams that are drawn to scale on the soil maps, such as the one for Rend Lake, will be labeled as the 802F map unit.

Areas labeled as Sewage Lagoons will be digitized as miscellaneous water, M-W.

Map unit symbols 5D2 and 5D3 convert to 5C3 in Franklin County and convert to 927D3 in Jefferson County.

Map unit symbol 7D2 converts to 927D3 in all areas of the survey except where it joins with Marion County. There it joins with 7D2.

Map unit symbol 339D converts to 301C3 in all areas of the survey except where it joins with Hamilton County. There it joins with 339D.

Map unit symbol 814D2 converts to 10C in Jefferson County and to 8D3 in Franklin County.

Map unit symbol 814D3 converts to 10D in Jefferson County and to 8D3 in Franklin County.

Map unit symbols 814E, 814E2 and 814E3 convert to 10D in Jefferson County and to 8D3 in Franklin County

Conventional and Special Symbols Legend:

Only those symbols indicated on the NRCS-SOILS-37A (7/96) will be shown on the legend and placed on the soil maps. Perennial drainage and/or irrigation ditches include intermitten drainage and/or irrigation ditches in Franklin and Jefferson Counties. The definition of the special symbols for other escarpment, marsh or swamp, severely eroded spot, and wet spot in Franklin and Jefferson Counties are not as stated in Part 647 (4/96) of the National Soil Survey Handbook.

INSERT CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

DEFINITIONS OF SPECIAL FEATURES FOR
FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS SOIL SURVEY

<u>Feature</u>	<u>Label</u>	<u>Feature Definition</u>
Depression, closed	DEP	A shallow, saucer-shaped area slightly lower on the landscape than the surrounding area, but without a natural outlet for surface drainage. Typically .25 to 3 acres.
Escarpment, bedrock	ESB	A relatively continuous and steep slope or cliff produced by erosion or faulting breaking the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock of Pennsylvanian age.
Escarpment, other	ESO	A relatively continuous and steep slope or cliff produced by erosion, but can be produced by faulting breaking the general continuity of more gently sloping land surfaces. Exposed material is nonbedrock.
Marsh or swamp	MAR	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 or shrubs. Typically .25 to 3 acres.
Mine or quarry	MPI	An open excavation from which soil and underlying material is removed exposing the bedrock. Also used to denote surface openings to underground mines. Typically .25 to 3 acres.
Perennial water	WAT	Small natural or manmade lake, pond, or pit that contains water most of the year. Typically .5 to 1.5 acres.
Rock outcrop	ROC	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. Typically .25 to 3 acres.
Sandy spot	SAN	Surface layer with sand content greater than 75 percent sand in areas where the surface layer of the named soils in the surrounding map unit have less than about 25 percent sand. Typically .25 to 3 acres.
Severely eroded spot	ERO	An area where on the average 75 percent or more of the original surface soil has been lost from accelerated erosion. Typically .25 to 3 acres.
Short, steep slope	SLP	Narrow soil area that has slopes that are at least 2 slope classes steeper than the slope class of the surrounding map unit.

<u>Feature</u>	<u>Label</u>	<u>Feature Definition</u>
Sodic spot	SOD	Surface layer with a sodium adsorption ratio that is 10 or more than the surface layer of the named soils in the surrounding map unit, which has a sodium adsorption ratio of 5 or less. Typically .25 to 3 acres.
Spoil area	SPO	Piles of earthy materials either smoothed or uneven resulting from human activity. Typically .25 to 3 acres.
Wet spot	WET	Somewhat poorly drained to very poorly drained area that is at least 1 drainage class wetter than the named soils in the surrounding map unit. Typically .25 to 3 acres.
Oil brine spot		Areas that do not support plant growth due to the inundation of salt brine or oil from oil wells. Typically .25 to 3 acres.
Subsided spot		Areas that are lower than the soils in the surrounding map units due to subsurface coal mining. These areas may be farmed but may pond water or become an obstruction in the field. Typically .25 to 3 acres.
Subsided area	subsided area	Areas greater than 3 acres in size that have been lowered due to subsurface mining. The water table and the slope of these areas may have changed from the surrounding similar soils. These areas may have been mitigated to improve surface drainage and to maintain previous use.

General Soil Map Units

The following map units will be used on the general soil map legend:

Hoyleton - Cisne
 Bluford - Wynoose
 Colp - Hurst - Okaw
 Ava - Bluford - Plumfield
 Grantsburg - Zanesville
 Belknap - Bonnie
 Rend - Wynoose, Bench - Bluford, Bench

CONVERSION LEGEND FOR FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS

Field symbol	Publication symbol						
M108	3108	4C3	10C	13A	13A	15bE1	8D3
R339E	340D3	5B1	3B2	13A0	13A	15bE2	8D3
R339G	421G	5B2	13B2	13A1	13A	15bE3	8D3
T2	376	5C	5C3	13B	13A	15AO	583B
T3A	377A	5C2	5C2	13B1	13B2	15B	583B
T3B2	377B2	5C3	5C3	13B2	13B2	15B1	583B
T12	639	5D	927D3	13C	13B2	15B2	583B
T13A	640A	5D1	5C3	13C2	13B2	15C	583C2
T13B2	518B2	5D2	5C3*	13C3	5C3	15C2	583C2
T14B	518B	5D3	927D3**	14A	13A	15C3	583C2
T14C2	518C2	5E	927D3	14B	14B	15D	15D3
V581	14B2	5E2	927D3	14B2	14B2	15D2	15D3
W	W	5E3	927D3	14C	14C2	15D3	15D3
W<40	W	7C2	7C2	14C2	14C2	15E	15D3
W85	1085	7D	927D3	14C3	10C	15E2	15D3
W108	1108	7D2	927D3	14D	14C2	15E3	15D3
W422	1085	7D3	927D3	14D2	14C2	26	84
W426	1085	8C3	10C	14D3	10D	26A0	84
W>40	WATER	8D	8D3	15	583B	34a	337A
WATER	WATER	8D2	8D2	15aB0	583B	34A0	13A
1	2	8D3	8D3	15aB1	583B	34A1	13A
1A0	2	8E	908F	15aB2	583B	34B0	13A
2	2	8E2	8D3	15aC2	583C2	34B1	13A
2A0	2	8E3	8D3	15aC3	583C2	34B2	13B2
3A	3A	8F	908F	15aD1	583C2	34B3	13B2
3A0	3A	8F1	908F	15aD2	583C2	34C1	13B2
3B	3A	8F2	908F	15aD3	583C2	34C2	13B2
3B0	3A	8F3	908F	15aE1	15D3	34C3	5C3
3B1	3B2	8F4	908F	15aE2	15D3	34D1	5C3
3B2	3B2	8G	8G	15aE3	15D3	34D2	5C3
3C	3B2	8G2	421G	15bB0	14B	34D3	5C3
3C2	3B2	8G3	421G	15bB1	14B	34D4	927D3
3C3	5C3	10C	10C	15bB2	14B2	34E2	927D3
4	4B2	10C3	10C	15bB3	14B2	34E3	927D3
4B	4B2	10D	10D	15bC1	14C2	35	12
4B1	4B2	10D3	10D	15bC2	14C2	35a	109
4B2	4B2	11	12	15bC3	10C	37	12
4C	4C2	11A0	12	15bD1	14C2	46C1	10C
4C1	4C2	12	12	15bD2	14C2	46C2	10C
4C2	4C2	12A0	12	15bD3	10C	46C3	10C

* Franklin County Only (See Instructions for Map Compilation and Map Finishing)

** Jefferson County Only

FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS --Continued

Field symbol	Publication symbol						
46D1	8D3	72A0	3072	214B	301B	340C2	301C3
46D2	8D3	84	84	214C2	301C3	340C3	301C3
46D3	8D3	84A1	84	214C3	301C3	340D	340D3
46E1	8D3	84A2	84	215D2	301C3	340D2	340D3
46E2	8D3	85	3085	287	287	340D3	340D3
46E3	8D3	85A0	3085	301B	301B	340E	340D3
46F1	908F	86	3382	301B1	301B	340E2	340D3
46F2	908F	108	3108	301B2	301B	340E3	340D3
46F3	908F	108+	3108	301C	301C3	376	376
46G1	421G	108A0	3108	301C2	301C3	377A	377A
46G2	421G	109	109	301C3	301C3	377B2	377B2
47C2	301C3	109A0	109	301D	301C3	382	3382
47C3	301C3	120	12	301D2	340D3	382A0	3382
47D1	340D3	120A0	12	301D3	340D3	386	3382
47D2	340D3	120A1	12	308D2	8D2	390	639
47D3	340D3	120A2	12	335	301B	391	640A
47E1	340D3	122A	122B	335A	301B	401	84
47E2	340D3	122B	122B	337	337A	420	3422
47E3	340D3	122B0	122B	337A	337A	421D	8D3
47F2	908F	122B2	122B2	337B0	337A	421D2	8D3
47F3	908F	122C2	122B2	337B1	337A	421D3	8D3
47G1	421G	122C3	122C3	338	338A	421E	908F
47G2	421G	122D	122C3	338A	338A	421E3	908F
47G3	421G	122D1	122C3	338A0	338A	421G	421G
49A0	84	122D2	122C3	338B	122B	422	3422
49A1	338A	122D3	122D3	338C2	122C3	422A	3422
49B0	122B	122E1	122D3	338C3	122C3	422A0	3422
49B1	122B	122E2	122D3	339C	301C3	425D	8D3
54	3072	122E3	122D3	339C3	301C3	425D3	8D3
58	3108	122F2	122D3	339D	301C3	425E2	908F
59	3085	122F3	122D3			425E3	908F
59W	1085	122G2	122D3	339D2	301C3	425F2	908F
63	3382	122G3	122D3	339D3	340D3	425F3	908F
70	3422	167	337A	339E	340D3	425G	421G
70A	3422	167A	337A	339E2	340D3	425G2	421G
70A0	3422	167B0	337A	339E3	340D3	425G3	421G
71	3085	167B1	337A	339F3	421G	426	3085
71A	3085	168	639	339G	421G	426A	3085
71A0	3085	169	640A	340C	301C3	426A0	3085
72	3072	169B	518B2	340C1	301C3	427	3072

FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS --Continued

Field symbol	Publication symbol						
467C2	122B2	802B	802B	929D	10C		
518B	518B	802F	802F	929D3	10D		
518B2	518B2	803F	802F	945E	908F		
518C2	518C2	814	10C	991	12		
523A	338A	814A	10C	1085	1085		
523A1	338A	814C2	14C2	1108	1108		
523B	122B	814C3	10C	1109	109		
523B1	122B	814D	10C	1422	1085		
524	84	814D2	10C**	1426	1085		
524A0	84	814D3	10D**				
525	3085	814E	10D**	3072	3072		
533	533	814E2	10D**	3085	3085		
536	536	814E3	10D**	3108	3108		
551D2	551D2	823A	823B	3226	3226		
581B2	14B2	823B	823B	3336	3336		
583B	583B	823D	871D	3382	3382		
583C2	583C2	825C	823B	3415	3415		
583C3	583C2	850C2	10C	3420	3422		
583D	15D3	850D	10C	3422	3422		
583D3	15D3	850D3	8D3	4085	1085		
605D3	927D3	866	866	4108	1108		
605E	927D3	871B	823B	4334	1108		
605E3	927D3	871D	871D	4420	1085		
620A	13A	871G	871G	4422	1085		
620B2	13B2	900D3	8D3	7084	84		
639	639	900E	908F	8382	3382		
640A	640A	900E3	908F				
640B2	518B2	900G	421G				
761F	421G	908D3	8D3				
761G	421G	908E	908F				
786D	908F	908E2	908F				
786D2	786D2	908F	908F				
786D3	908F	908G	421G				
786E	908F	912A	3A				
786E3	908F	912B2	3B2				
786G	421G	927C3	5C3				
787	3382	927D3	927D3				
787A	3382	929C	10C				
801	802B	929C2	10C				
802	802B	929C3	10C				

** Jefferson County Only (See Instructions for Map Compilation and Map Finishing)

ALPHABETIC LISTING OF SOIL MAP UNITS
ON THE SOIL IDENTIFICATION LEGEND OF
FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS

SYMBOL SOIL MAP UNIT NAME

7C2	ATLAS SILT LOAM, 5 TO 10 PERCENT SLOPES, ERODED
7D2	ATLAS SILT LOAM, 10 TO 18 PERCENT SLOPES, ERODED
14B	AVA SILT LOAM, 2 TO 5 PERCENT SLOPES
14B2	AVA SILT LOAM, 2 TO 5 PERCENT SLOPES, ERODED
14C2	AVA SILT LOAM, 5 TO 10 PERCENT SLOPES, ERODED
3382	BELKNAP SILT LOAM, FREQUENTLY FLOODED
5C2	BLAIR SILT LOAM, 5 TO 10 PERCENT SLOPES, ERODED
5C3	BLAIR SILTY CLAY LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED
927D3	BLAIR-ATLAS SILTY CLAY LOAMS, 10 TO 18 PERCENT SLOPES, SEVERELY ERODED
13A	BLUFORD SILT LOAM, 0 TO 2 PERCENT SLOPES
13B2	BLUFORD SILT LOAM, 2 TO 5 PERCENT SLOPES, ERODED
640A	BLUFORD SILT LOAM, BENCH, 0 TO 2 PERCENT SLOPES
1108	BONNIE SILT LOAM, UNDRAINED, FREQUENTLY FLOODED
3108	BONNIE SILT LOAM, FREQUENTLY FLOODED
3422	CAPE SILTY CLAY LOAM, FREQUENTLY FLOODED
287	CHAUNCEY SILT LOAM
2	CISNE SILT LOAM
376	CISNE SILT LOAM, BENCH
122B	COLP SILT LOAM, 2 TO 5 PERCENT SLOPES
122B2	COLP SILT LOAM, 2 TO 5 PERCENT SLOPES, ERODED
122C3	COLP SILTY CLAY LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED
122D3	COLP SILTY CLAY LOAM, 10 TO 18 PERCENT SLOPES, SEVERELY ERODED
337A	CREAL SILT LOAM, 0 TO 2 PERCENT SLOPES
536	DUMPS, MINE
866	DUMPS, SLURRY
786D2	FRONDORF SILT LOAM, 10 TO 18 PERCENT SLOPES, ERODED
551D2	GOSPORT LOAM, 10 TO 18 PERCENT SLOPES, ERODED
301B	GRANTSBURG SILT LOAM, 2 TO 5 PERCENT SLOPES
301C3	GRANTSBURG SILTY CLAY LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED
8D3	HICKORY CLAY LOAM, 10 TO 18 PERCENT SLOPES, SEVERELY ERODED
8D2	HICKORY SILT LOAM, 10 TO 18 PERCENT SLOPES, ERODED
8F	HICKORY SILT LOAM, 18 TO 35 PERCENT SLOPES
8G	HICKORY SILT LOAM, 35 TO 60 PERCENT SLOPES
908F	HICKORY-KELL 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
377A	HOYLETON SILT LOAM, BENCH, 0 TO 2 PERCENT SLOPES
377B2	HOYLETON SILT LOAM, BENCH, 2 TO 5 PERCENT SLOPES, ERODED
338A	HURST SILT LOAM, 0 TO 2 PERCENT SLOPES
1085	JACOB SILTY CLAY, UNDRAINED, FREQUENTLY FLOODED
3085	JACOB SILTY CLAY, FREQUENTLY FLOODED
421G	KELL SILT LOAM, 35 TO 60 PERCENT SLOPES
871D	LENZBURG GRAVELLY SILTY CLAY LOAM, 7 TO 20 PERCENT SLOPES
871G	LENZBURG GRAVELLY SILTY CLAY LOAM, 20 TO 60 PERCENT SLOPES
84	OKAW SILT LOAM
3415	ORION SILT LOAM, FREQUENTLY FLOODED

SYMBOL SOIL MAP UNIT NAME

802B ORTHENTS, LOAMY, UNDULATING
802F ORTHENTS, LOAMY, HILLY AND VERY HILLY
15D3 PARKE SILTY CLAY LOAM, 10 TO 18 PERCENT SLOPES, SEVERELY
ERODED
583B PIKE SILT LOAM, 2 TO 5 PERCENT SLOPES
583C2 PIKE SILT LOAM, 5 TO 10 PERCENT SLOPES, ERODED
10C PLUMFIELD SILTY CLAY LOAM, 5 TO 10 PERCENT SLOPES
10D PLUMFIELD SILTY CLAY LOAM, 10 TO 18 PERCENT SLOPES
109 RACON SILT LOAM
518B REND SILT LOAM, 2 TO 5 PERCENT SLOPES
518B2 REND SILT LOAM, 2 TO 5 PERCENT SLOPES, ERODED
518C2 REND SILT LOAM, 5 TO 10 PERCENT SLOPES, ERODED,
4B2 RICHVIEW SILT LOAM, 2 TO 5 PERCENT SLOPES, ERODED
4C2 RICHVIEW SILT LOAM, 5 TO 10 PERCENT SLOPES, ERODED
823B SCHULINE SILT LOAM, 2 TO 5 PERCENT SLOPES
3072 SHARON SILT LOAM, FREQUENTLY FLOODED
533 URBAN LAND
WATER WATER GREATER THAN 40 ACRES
W WATER LESS THAN 40 ACRES
339D WELLSTON SILT LOAM, 10 TO 18 PERCENT SLOPES
3336 WILBUR SILT LOAM, FREQUENTLY FLOODED
3226 WIRT SILT LOAM, FREQUENTLY FLOODED
12 WYNOOSE SILT LOAM
639 WYNOOSE SILT LOAM, BENCH
340D3 ZANESVILLE SILTY CLAY LOAM, 10 TO 18 PERCENT SLOPES, SEVERELY
ERODED

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

1. Laboratory Data from NSSL. SCS-SOI-8s have been completed.

<u>Sampled As</u>	<u>Pedon #</u>	<u>Symbol</u>	<u>Approved</u>
AVA	89IL-055-025	14B	AVA
AVA	90IL-055-007	14B	AVA
AVA	90IL-081-006	14B	AVA
AVA	90IL-081-018	14B	AVA
AVA	90IL-081-028	14B	AVA
AVA	91IL-055-004	14B2	AVA
AVA	91IL-055-005	14B	AVA
AVA	90IL-055-006	14B	AVA
AVA	91IL-055-009	14B2	AVA
AVA	91IL-055-016	14C2	AVA
AVA	91IL-055-017	14C2	AVA
AVA	91IL-055-019	14B	AVA
BLUFORD	91IL-055-021	14B	AVA
AVA	91IL-055-023	518B	AVA
GRANTSBURG	90IL-055-010	301B	GRANTSBURG
BELKNAP	91IL-055-008	3382	BANLIC
BANLIC	91IL-055-012	3382	BANLIC
BELKNAP	91IL-081-004	3382	BELKNAP
BELKNAP	90IL-055-001	3382	BELKNAP
BELKNAP	90IL-081-004	3382	BELKNAP
BLAIR	90IL-055-017	5C3	BLAIR
BLUFORD	88IL-081-002	13A	BLUFORD
BLUFORD	89IL-081-001	13A	BLUFORD
BLUFORD	90IL-055-004	13B2	BLUFORD
BLUFORD	90IL-055-009	13A	BLUFORD
BLUFORD	90IL-081-008	13A	BLUFORD
BLUFORD	90IL-081-009	13A	BLUFORD
BLUFORD	90IL-081-014	13A	BLUFORD
BLUFORD	90IL-081-017	13A	BLUFORD
BLUFORD	90IL-081-027	13A	BLUFORD
AVA	90IL-081-028	14B	AVA
BLUFORD	90IL-081-029	13A	BLUFORD
BLUFORD	91IL-055-010	13B2	BLUFORD
BLUFORD, BENCH	91IL-055-006	640A	BLUFORD, BENCH PHASE
BLUFORD	90IL-055-008	640A	BLUFORD, BENCH PHASE
BLUFORD, BENCH	90IL-081-002	640A	BLUFORD, BENCH PHASE
BLUFORD, BENCH	90IL-081-003	640A	BLUFORD, BENCH PHASE
BLUFORD	90IL-081-021	640A	BLUFORD, BENCH PHASE
BLUFORD	90IL-081-026	640A	BLUFORD, BENCH PHASE
BLUFORD	91IL-055-007	640A	BLUFORD, BENCH PHASE
BLUFORD	93IL-055-108	640A	BLUFORD, BENCH PHASE
BONNIE	90IL-081-024	3108	BONNIE
PIOPOLIS	91IL-055-027	1108	BONNIE, TAXADJUNCT (NONACID)
CISNE	89IL-055-018	2	CISNE
CISNE	90IL-081-013	2	CISNE
CISNE	90IL-081-019	2	CISNE
CISNE	90IL-081-020	2	CISNE

<u>Sampled As</u>	<u>Pedon #</u>	<u>Symbol</u>	<u>Approved</u>
WYNOOSE/CISNE	90IL-081-010	2	CISNE
CISNE	93IL-055-101	2	CISNE
CISNE	93IL-055-102	2	CISNE
CISNE	93IL-055-106	2	CISNE
CISNE	93IL-055-107	2	CISNE
CISNE BENCH	92IL-055-007	376	CISNE, BENCH PHASE
CISNE BENCH	92IL-055-008	376	CISNE, BENCH PHASE
CISNE BENCH	92IL-055-009	376	CISNE, BENCH PHASE
CISNE BENCH	92IL-055-010	376	CISNE, BENCH PHASE
CISNE BENCH	92IL-055-011	376	CISNE, BENCH PHASE
CISNE BENCH	92IL-055-013	376	CISNE, BENCH PHASE
CISNE, MOLLIC	93IL-055-103	376	CISNE, BENCH PHASE
CREAL	90IL-055-012	337A	CREAL
CREAL	90IL-055-023	337A	CREAL
CREAL	90IL-081-023	337A	CREAL
GRANTSBURG	90IL-081-011	301B	GRANTSBURG
GRANTSBURG	90IL-081-012	301B	GRANTSBURG
GRANTSBURG	91IL-055-011	301B	GRANTSBURG
HOYLETON	90IL-081-015	3B2	HOYLETON
HOYLETON	90IL-081-016	3A	HOYLETON
HOYLETON	90IL-081-016A	3B2	HOYLETON
HOYLETON	93IL-055-105	3A	HOYLETON
HOYLETON BENCH	92IL-055-005	377A	HOYLETON, BENCH PHASE
HOYLETON BENCH	92IL-055-012	377A	HOYLETON, BENCH PHASE
HOYLETON BENCH	92IL-055-014	377A	HOYLETON, BENCH PHASE
JACOB	89IL-055-017	3085	JACOB
JACOB	89IL-055-022	3085	JACOB
JACOB	91IL-055-025	3085	JACOB
JACOB	91IL-055-026	3085	JACOB
PIKE	90IL-055-005	583C2	PIKE
PIKE	91IL-055-014	583C2	PIKE TAXADJUNCT fine-silty, mixed, mesic Typic Hapludalfs
PIKE	91IL-055-015	583C2	PIKE TAXADJUNCT fine-silty, mixed, mesic Typic Hapludalfs
PIKE	91IL-055-024	583B	PIKE
PIOPOLIS T	90IL-081-005	3422	CAPE
PLUMFIELD	89IL-055-003	10C	PLUMFIELD
PLUMFIELD	89IL-055-015	10C	Plumfield, OSED pedon
PLUMFIELD	90IL-055-021	10D	Plumfield, map unit rep. pedon
PLUMFIELD	88IL-055-003	10C	PLUMFIELD, TAXADJUNCT
PLUMFIELD	90IL-081-025	10C	PLUMFIELD, TAXADJUNCT
RACoon	90IL-055-011	109	RACoon, typical pedon for survey area
AVA BENCH	92IL-055-006	518B2	REND
RICHVIEW	93IL-055-104	4B2	RICHVIEW
WYNOOSE	89IL-055-026	639	WYNOOSE, BENCH PHASE
WYNOOSE	90IL-081-022	639	WYNOOSE, BENCH PHASE
RINARD	93IL-055-109	639	WYNOOSE, BENCH PHASE
WYNOOSE	90IL-081-007	12	WYNOOSE, TAXADJUNCT

2. Laboratory Data from University of Illinois Pedology Laboratory.
SCS-SOI-8s completed.

<u>Sampled As</u>	<u>Pedon #</u>	<u>Symbol</u>	<u>Approved</u>
ATLAS	89IL-055-0057C3	BLAIR	
AVA	88IL-055-00310C	BLAIR	
BLUFORD	88IL-055-001640A	BLUFORD	
BLUFORD	88IL-081-00213A	BLUFORD	
BLUFORD	89IL-055-00313A	BLUFORD, TAXADJUNCT	
OKAW	77IL-055-0013085	JACOB	
WYNOOSE	36IL-081-00112	WYNOOSE	
WYNOOSE	88IL-055-002639	WYNOOSE Bench Phase, rep. pedon	
WYNOOSE	88IL-055-00712	WHITSON	
WYNOOSE	88IL-055-008639	WYNOOSE	
WYNOOSE	89IL-055-001639	RACoon	

3. Engineering Test Data from Illinois Department of Transportation.
SCS-SOI-10s completed.

<u>Sampled As</u>	<u>Pedon #</u>	<u>Symbol</u>	<u>Approved</u>
BLUFORD	89IL-081-00913A	BLUFORD	
CISNE	89IL-055-0182	CISNE	
WYNOOSE	89IL-055-026639	WYNOOSE, BENCH PHASE	
BELKNAP	90IL-055-0013382	BEKLNAP	

Notes to Accompany the Classification and Correlation
of the Soils of
Franklin and Jefferson Counties, Illinois
by John C. Doll, December 1995

(* indicates typical pedon for the survey area)

	ATLAS	7C2	(Marion County)
	ATLAS	7D2	(Marion County)
*	BLAIR-ATLAS	927D3	91IL-081-012

These soils in mapping units 7C2 and 7D2 are added for joining at county line. Typical pedons for 7C2 and 7D2 are in Marion County. Map unit descriptions are from Marion County soil survey. Atlas series typical pedon in this survey area is from mapping unit 927D3 Blair-Atlas silty clay loams 10 to 18 percent slopes, severely eroded.

*	AVA	14B	89IL-081-08
	AVA	14B2	92IL-081-04
	AVA	14C2	92IL-055-17

These soils in mapping units 14B2 and 14C2 have less than 25 inches of Peoria loess remaining at the surface. They are not considered taxadjuncts.

*	BELKNAP	3382	90IL-081-34
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	BLAIR	5C2	(Wayne County)
*	BLAIR	5C3	90IL-055-17
	BLAIR-ATLAS	927D3	93IL-081-002

Series typical pedon in this survey area is from map unit 5C3 and is fine-silty. However, some of these soils in mapping unit 5C3 have a higher content of sand in the upper part of the particle size control section. They classify as fine-loamy, mixed, mesic Aquic Hapludalfs. These areas were mapped as unit 927C3 on the original field sheets. All of the Blair soils in map unit 927D3 are fine-loamy and are considered to be taxadjuncts. These fine-loamy components may be separated out as a new series in future updates. Also, mapping unit 5C2 is added to the legend for joining at county lines; the map unit pedon and map unit description is from the Wayne County soil survey

*	BLUFORD	13A	89IL-081-09
	BLUFORD	13B2	
	BLUFORD	640A	90IL-081-30

These soils in mapping unit 640A are on benches. They are mapped separately from Bluford soils in mapping unit 13A because of landform position and slightly higher yields for major crops.

*	BONNIE	1108	91IL-081-06
	BONNIE	3108	90IL-055-19

*	CAPE	3422	91IL-055-33
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* CHAUNCEY 287 90IL-081-31

* CISNE 2 89IL-055-12
CISNE 376 93IL-055-01

These soils in mapping unit 376 are on benches. They are mapped separately from Cisne soil in mapping unit 2 because of landform position and slightly higher yields for major crops.

* COLP 122B 89IL-055-14
COLP 122B2 (Jackson County)
COLP 122C3 91IL-055-31
COLP 122D3 91IL-055-32

These soils in mapping unit 122B2 are added for joining at county lines. Typical pedon for mapping unit 122B2 is in Jackson County. Mapping unit description will be written to match that pedon. Series typical pedon is in this survey area.

* CREAL 337A 91IL-055-28

536 DUMPS, MINE

This miscellaneous land type is used for slag piles and other non-soil areas associated with mining operations.

DUMPS 866

This miscellaneous land type consists of slurry ponds associated with mining operations.

FRONDORF 786D2(Marion County)

These soils are added for joining at county lines. The representative pedon is in Marion County. Series and map unit descriptions will be written based on that pedon. It is likely that MLRA investigation of these soils in surrounding counties will determine that these soils might better fit the concept of the Kell series.

GOSPORT 551D2 (Marion County)

These soils are added for joining at county lines. The representative pedon is in Marion County. Series and map unit descriptions will be written based on that pedon.

* GRANTSBURG 301B 89IL-081-10
GRANTSBURG 301C3

These soils in mapping unit 301C3 have fragipan nearer the surface than defined for the series. Shallowness is due largely to severe erosion on this landform.

HICKORY 8D2 (Washington County)
HICKORY 8D3 93IL-055-03
HICKORY 8F (Washington County)
HICKORY 8G (Washington County)

PIKE 583C2 92IL-055-01

These soils in this survey area are taxadjuncts because base saturation is >60% (79% and 78% in two pedons characterized by NSSL) at 125 cm below the top of the argillic horizon. These soils classify as fine-silty, mixed, mesic Typic Hapludalfs.

* PLUMFIELD 10C 89IL-055-15 (OSED PEDON)
PLUMFIELD 10D 90IL-055-21

This is a new series established with this correlation. Central concept hinges on soil with fragic properties at or very near the surface. Typically the surface layer has the maximum clay content within the profile. Soil is highly erosive and has low fertility.

* RACOON 109 90IL-055-11

REND 518B 92IL-055-16

REND 518B2 93IL-055-03

* REND 518C2 91IL-055-38 (OSED PEDON)

This series is established with this correlation.

* RICHVIEW 4B2 89IL-055-16
RICHVIEW 4C2 92IL-055-04

* SCHULINE 823B 90IL-081-33

These soils in this survey average more than 15% gravel and channers in the upper meter of the profile. They are not considered taxadjuncts for this reason.

* SHARON 3072 90IL-055-18

URBAN LAND 533

This miscellaneous land type is used in downtown area of Mt. Vernon and in the major commercial areas near town.

WATER GREATER THAN 40 ACRES WATER
WATER LESS THAN 40 ACRES W

WELLSTON 339D (Hamilton County)

These soils are added for joining at county lines. Series and map unit pedon are in Hamilton County. Series and map unit descriptions will be written based on pedon in that survey.

WILBUR 3336 (Washington County)

These soils are added for joining at county lines. The typical pedon is in Washington County. Mapping unit and series descriptions are from Washington County soil survey.

WIRT 3226 (Marion County)

These soils are added for joining at county lines. The representative pedon is in Marion County. Series and map unit descriptions will be written based on that pedon.

* WYNOOSE 12 89IL-081-12
WYNOOSE 639 89IL-055-02

These soils in mapping unit 639 are on benches. They are mapped separately from Wynoose soils in mapping unit 12 because of landform position and slightly higher yields for major crops.

* ZANESVILLE 340D3 90IL-081-32

These soils in this survey area have 3Bt horizon formed in residuum of sedimentary rocks.

SOIL SURVEY FRANKLIN AND JEFFERSON COUNTIES, ILLINOIS
 APRIL 23, 1997

CLASSIFICATION OF THE SOILS

An asterick in the first column indicates that the soil is a taxadjunct to the series. See "Notes to Accompany the Classification and Correlation of the Soils of Franklin and Jefferson Counties, Illinois" for a description of those characteristics of the soil that are outside the range of the series.

Soil name	Family or higher taxonomic class
Atlas	Fine, smectitic, mesic Aeric Chromic Vertic Epiaqualfs
Ava	Fine-silty, mixed, mesic Oxyaquic Fragiudalfs
Belknap	Coarse-silty, mixed, acid, mesic Aeric Fluvaquents
Blair	Fine-silty, mixed, mesic Aquic Hapludalfs
Bluford	Fine, smectitic, mesic Aeric Chromic Vertic Epiaqualfs
Bonnie	Fine-silty, mixed, acid, mesic Typic Fluvaquents
Cape	Fine, smectitic, acid, mesic Vertic Fluvaquents
Chauncey	Fine, smectitic, mesic Typic Argialbolls
Cisne	Fine, smectitic, mesic Vertic Albaqualfs
Colp	Fine, smectitic, mesic Aquertic Chromic Hapludalfs
Creal	Fine-silty, mixed, mesic Aeric Endoaqualfs
Frondorf	Fine-loamy, mixed, mesic Ultic Hapludalfs
Gosport	Fine, illitic, mesic Typic Dystrochrepts
Grantsburg	Fine-silty, mixed, mesic Oxyaquic Fragiudalfs
Hickory	Fine-loamy, mixed, mesic Typic Hapludalfs
Hoyleton	Fine, smectitic, mesic Aquertic Hapludalfs
Hurst	Fine, smectitic, mesic Aeric Chromic Vertic Epiaqualfs
Jacob	Very-fine, smectitic, acid, mesic Vertic Endoaquepts
Kell	Fine-loamy, mixed, mesic Ultic Hapludalfs
Lenzburg	Fine-loamy, mixed, calcareous, mesic Typic Udorthents
Okaw	Fine, smectitic, mesic Chromic Vertic Albaqualfs
*Orion	Coarse-silty, mixed, nonacid, mesic Aquic Udifluvents
Orthents	Fine-loamy, mixed, mesic Typic Udorthents
*Parke	Fine-silty, mixed, mesic Ultic Hapludalfs
*Pike	Fine-silty, mixed, mesic Ultic Hapludalfs
Plumfield	Fine-silty, mixed, mesic Ochreptic Fragiudalfs
Racoon	Fine-silty, mixed, mesic Typic Endoaqualfs
Rend	Fine-silty, mixed, mesic Fragic Oxyaquic Hapludalfs
Richview	Fine-silty, mixed, mesic Oxyaquic Hapludalfs
Schuline	Fine-loamy, mixed, calcareous, mesic Typic Udorthents
Sharon	Coarse-silty, mixed, acid, mesic Oxyaquic Udifluvents
Wellston	Fine-silty, mixed, mesic Ultic Hapludalfs
Wilbur	Coarse-silty, mixed, mesic Fluvaquentic Eutrocrepts
Wirt	Coarse-loamy, mixed, mesic Dystric Fluventic Eutrochrepts
Wynoose	Fine, smectitic, mesic Chromic Vertic Albaqualfs
Zanesville	Fine-silty, mixed, mesic Oxyaquic Fragiudalfs

Certifications:

The Soil Survey Area 11 Team Leader certifies that:

1. Interpretations are coordinated with adjoining survey areas. The manuscript is being checked so that the soil interpretations records are consistent with text and tables. Exceptions to perfect agreement between SIR data and the manuscript are noted in this Correlation Memorandum.
2. The location of all series typical pedons has been checked for correct location and for the soil delineations using that name. Not all typical pedons are located in Franklin or Jefferson County. This occurs where map units are added at the county boundary for joining purposes.
3. All publication symbols will be those shown as approved in the conversion legend and the symbols legend contained in this Correlation Memorandum.
4. All typifying pedons used for classification are accurately classified according to Soil Taxonomy.
5. Soil maps have been reviewed for completeness, accuracy, and consistency.
6. This soil survey joins adjacent published modern soil surveys. Joining has been checked with the published detailed and general soil maps in adjacent counties.

This survey area joins the following survey areas:

- Clinton County (Modern survey completed, not published)
- Hamilton County (Published)
- Jackson County (Published)
- Marion County (Published)
- Perry County (Published)
- Saline County (Published)
- Washington County (Modern survey completed, not published)
- Wayne County (Published)
- Williamson County (Published, but placed in an extensive revision category; thus, a quality join was not made.)

Approved join statements are attached :

DETAILED SOIL MAPS

<u>FRANKLIN AND JEFFERSON</u>	<u>MARION COUNTY</u>	<u>EXPLANATION</u>
3B2 Hoyleton SIL, 2-5% eroded	3B Hoyleton SIL, 2-5%	Will make change in Marion County official map #78.
927D3 Blair-Atlas, 10-18%, sev er	5D3 Blair SICL, 10-18% sev er	Blair soils were not mapped as consociations in Jefferson Co. Atlas soils were named inclusion in Marion survey.

FRANKLIN AND JEFFERSON**MARION COUNTY (cont.)****EXPLANATION**8D3 Hickory CL, 10-18%
sev er8E3 Hickory CL, 15-25%,
sev er

Slopes over-lap;

14B Ava SIL, 2-5%

13B Bluford SIL, 2-5%

Convex crests have water regimes more like Ava (Oxyaquic Fragiudalfs) than Bluford (Aeric Chromic Vertic Epiqualfs)

10C Plumfield SICL,
5-10%14C3 Ava SICL, 5-10%
sev er

Plumfield soils established for very severely eroded areas of Ava soils. These soils have fragipan at or near the surface.

8F Hickory SIL, 18-35%

15B2 Parke SIL, 3-7%
eroded

Unit does not come across county line. Will correct on official Marion County map.

2 Cisne SIL

218 Newberry SIL

One unit crosses line. Newberry soils not mapped in Jefferson. Will adjust on official Marion County map.

421G Kell SIL, 35-60%

761G Frondorf SIL,
25-45%

Kell is established in Franklin and Jefferson Counties. Kell concept better fits majority of areas mapped as Frondorf on slopes > 35% throughout Southern Illinois.

3A Hoyleton SIL, 0-2%

912A Hoyleton-Darmstadt
0-2%

Darmstadt soils were not recognized in Jefferson County. Will adjust official map for Marion County.

7C2 Atlas SIL, 5-10%
eroded987C2 Atlas-Grantfork
Variant, 4-12%
eroded

Grantfork Variant soils were not recognized in Jefferson Co.

2 Cisne

991 Cisne-Huey

Huey soils were not recognized in Jefferson County. Will adjust Marion official maps.

<u>FRANKLIN AND JEFFERSON</u>	<u>MARION COUNTY (cont.)</u>	<u>EXPLANATION</u>
3382 Belknap SIL, freq	3225 Holton SIL, freq	areas of these alluvial soils in Jefferson are silty (Belknap) not loamy (Holton)
3382 Belknap SIL, freq	3333 Wakeland SIL, freq	Alluvial soils in Jefferson are acid throughout.
3108 Bonnie SIL, freq	3334 Birds SIL, freq	Alluvial soils in Jefferson are acid throughout.
3382 Belknap, SIL, freq	8787 Banlic SIL, occas	areas are on natural levees. Belknap is better conceptual fit, and brittleness is not consistent property in areas of these soils in Jefferson County.

<u>FRANKLIN AND JEFFERSON</u>	<u>PERRY COUNTY</u>	<u>EXPLANATION</u>
8F Hickory SIL, 18-35%	8E3 Hickory CL, 18-30% sever	Severely eroded soils on these slopes were not mapped in this survey.
14B Ava SIL, 2-5%	13B Bluford SIL, 2-5%	Convex crests have water regimes more like Ava (Oxyaquic Fragiudalfs) then Bluford (Aeric Chromic Vertic Epiaqualfs)
3108 Bonnie SIL, freq	108 Bonnie SIL, freq	Perry survey assigned long duration flooding. Flooding is brief (or very brief) in this survey.
3382 Belknap SIL, freq	787 Banlic SIL	areas are on natural levees. Belknap is better conceptual fit, and brittleness is not consistent property in areas of these soils in this survey.

FRANKLIN AND JEFFERSON**PERRY COUNTY (cont.)****EXPLANATION**

3382 Belknap SIL, freq

108 Bonnie SIL, freq

areas north of State Highway 154 are on natural levees. Belknap is a better conceptual fit in areas of these soils adjoining the Little Muddy River.

908F Hickory-Kell,
18-35%900E Hickory-Wellston,
18-30%

Kell soils better fit soils on these back slope positions. Areas are not uniformly underlain by sandstone and rarely are they silty in the upper part.

908F Hickory-Kell
18-35%900E3 Hickory-Wellston,
18-30%, sev er

In addition to note above, severely eroded map units were not recognized in this survey. Very few areas have been managed where severe erosion likely would have occurred.

421G Kell SIL, 35-60%

900G Hickory-Wellston,
30-60%

Areas on G-slope back slopes are < 60 inches to bedrock (not Hickory) and are loamy rather than silty in the material above the residuum.

10D Plumfield SICL,
10-18%929D3 Ava-Hickory,
10-18%, sev er

Hickory soils are minor inclusion in this map unit. Plumfield soils established for very severely eroded areas of Ava soils. These soils have fragipan at or near the surface.

FRANKLIN AND JEFFERSON**SALINE COUNTY****EXPLANATION**

3A Hoyleton SIL, 0-2%

3B Hoyleton SIL, 1-4%

Saline maps will be adjusted to add 3A in summit/interfluv positions.

3B2 Hoyleton SIL, 2-5%

3B Hoyleton SIL, 1-4%

Saline maps will be adjusted to add 3B2 on side slope summit positions.

10C Plumfield SICL,
5-10%14D3 Ava SICL, 5-12%
sever

Plumfield soils established for very severely eroded areas of Ava soils. These soils have fragipan at or near the surface.

FRANKLIN AND JEFFERSON**WAYNE COUNTY****EXPLANATION**

14B Ava SIL, 2-5%

13B Bluford SIL, 2-5%

Convex crests have water regimes more like Ava (Oxyaquic Fragiudalfs) than Bluford (Aeric Chromic Vertic Epiaqualfs)

10C Plumfield SICL,
5-10%14C3 Ava SICL, 5-10%
sever

Plumfield soils established for very severely eroded areas of Ava soils. These soils have fragipan at or near the surface.

301C3 Grantsburg SICL,
5-10%, sever340C3 Zanesville SICL,
5-10%, sever

These soils on side slope positions are better characterized by Grantsburg soils.

3382 Belknap SIL, freq

3787 Banlic SIL, freq

These areas are on entire floodplains. Belknap is better conceptual fit, and brittleness is not consistent property in areas of these soils in this survey.

<u>FRANKLIN AND JEFFERSON</u>	<u>WAYNE COUNTY (cont.)</u>	<u>EXPLANATION</u>
3382 Belknap SIL, freq	8382 Belknap SIL, occas	One area where occas flooding in Wayne joins freq in Jefferson. Wayne has freq on adjacent map unit of Bonnie. Will adjust Wayne map on official copy.
<u>FRANKLIN AND JEFFERSON</u>	<u>JACKSON COUNTY</u>	<u>EXPLANATION</u>
14B Ava SIL, 2-5%	13B Bluford SIL, 2-5%	Convex crests have water regimes more like Ava (Oxyaquic Fragiudalfs) then Bluford (Aeric Chromic Vertic Epiaqualfs)
338A Hurst SIL, 0-2%	122A Colp SIL, 0-2%	Nearly level terrace treads are better characterized by Hurst soils. Will adjust Jackson County official maps.
338A Hurst SIL, 0-2	338A Hurst SIL, 0-2%	These soils in Jackson are stated to be frequently flooded. where they join at the county line they are not subject to flooding.
3382 Belknap SIL, freq	787 Banlic SIL	These areas are on entire floodplains. Belknap is better conceptual fit, and brittleness is not consistent property in areas of these soils in this survey.
1085 Jacob SIC, freq undrained	W85 Jacob SIC, wet	Symbol and name change for MLRA uniformity.

<u>FRANKLIN AND JEFFERSON</u>	<u>JACKSON COUNTY (cont.)</u>	<u>EXPLANATION</u>
1108 Bonnie SIL, freq	W420 Piopolis SICL, wet	Symbol and series change, undrained areas of Piopolis soils in Franklin County are included with undrained Bonnie. Franklin and Jefferson survey has only 2 undrained phases - one is clayey the other is silty. No other distinction was made due to the extreme wetness of the areas.

<u>FRANKLIN AND JEFFERSON</u>	<u>WASHINGTON COUNTY</u>	<u>EXPLANATION</u>
8D3 Hickory CL, 10-18% sev er	8D3 Hickory SICL, 10-15% sev er	Difference in surface texture and slope range. CL is dominant situation in Jefferson County.

GENERAL SOIL MAP

<u>FRANKLIN AND JEFFERSON</u>	<u>WAYNE COUNTY</u>	<u>EXPLANATION</u>
Belknap-Bonnie	Ava-Blair-Hickory	Large flood plain crosses county line. STATSGO map carries flood plain unit from Wayne into Jefferson County.

	<u>JACKSON COUNTY</u>	
Hoyleton-Cisne	Hurst-Colp-St. Charles	Benches were mapped as terrace soils in Jackson survey. Franklin County maps these areas as bench phases of "traditional" upland soils.

All other general soil map associations in Franklin and Jefferson Counties have at least one major soil in common with soil map association in adjoining county.

APPROVAL SIGNATURE AND DATE

April 1997

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