OFFICIAL COPY

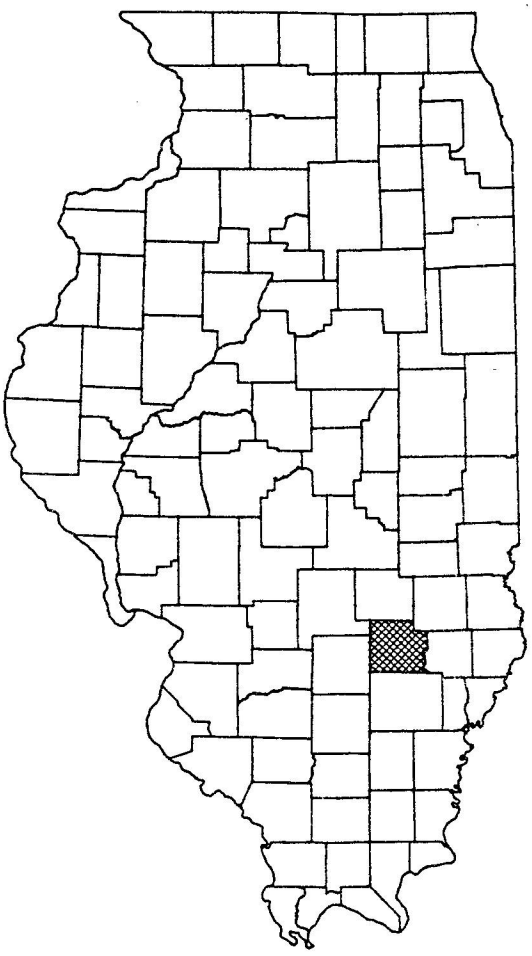
CLASSIFICATION AND CORRELATION

OF THE SOILS

OF

CLAY COUNTY, ILLINOIS

FEBRUARY, 1993



UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
CHAMPAIGN, ILLINOIS 61820

United States Department of Agriculture
Soil Conservation Service

Classification and Correlation
of the Soils of
Clay County, Illinois

(2) This correlation was prepared by Kenneth A. Gotsch, area resource soil scientist, in February 1993. The final field review was conducted June 1991 by Lester Bushue with Tonie J. Endres, survey leader. Carl Glocker, soil scientist, SSQA participated in the final field review and reviewed this document.

Decisions at the final field review were based on pedon data, soil correlation samples, soil maps, final field review notes, preliminary tables of interpretations, and the draft manuscript.

(3) 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 or miscellaneous areas. A final number of 2 following the slope letter indicates that the soil is moderately eroded, and 3 indicates that it is severely eroded.

(4)

SOIL CORRELATION OF
CLAY COUNTY, ILLINOIS

Field symbols	Field map unit name	Publication symbol	Approved map unit name
2, 287A	Cisne silt loam	2	Cisne silt loam
3A	Hoyleton silt loam, 0 to 2 percent slopes	3A	Hoyleton silt loam, 0 to 2 percent slopes
3B	Hoyleton silt loam, 2 to 5 percent slopes	3B	Hoyleton silt loam, 2 to 5 percent slopes
3B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded	3B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded
4B	Richview silt loam, 1 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
5C2, 31C2	Blair silt loam, 5 to 10 percent slopes, eroded	5C2	Blair silt loam, 5 to 10 percent slopes, eroded
5C3, 31C3	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
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, 5D2	Atlas silt loam, 10 to 18 percent slopes, eroded	7D2	Atlas silt loam, 10 to 18 percent slopes, eroded
7D3, 5D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded	7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded

CLAY COUNTY, ILLINOIS --continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
8D2, 551D2	Hickory silt loam, 10 to 18 percent slopes, eroded	8D2	Hickory silt loam, 10 to 18 percent slopes, eroded
8D3	Hickory clay loam, 10 to 18 percent slopes, severely eroded	8D3	Hickory clay loam, 10 to 18 percent slopes, severely eroded
8F	Hickory loam, 18 to 35 percent slopes	8F	Hickory loam, 18 to 35 percent slopes
8E3	Hickory clay loam, 18 to 25 percent slopes, severely eroded	8F3	Hickory clay loam, 18 to 35 percent slopes, severely eroded
8G	Hickory loam, 35 to 60 percent slopes	8G	Hickory loam, 35 to 60 percent slopes
12	Wynoose silt loam	12	Wynoose silt loam
13A	Bluford silt loam, 0 to 2 percent slopes	13A	Bluford silt loam, 0 to 2 percent slopes
13B	Bluford silt loam, 2 to 5 percent slopes	13B	Bluford silt loam, 2 to 5 percent slopes
13B2	Bluford silt loam, 2 to 5 percent slopes, eroded	13B2	Bluford silt loam, 2 to 5 percent slopes, eroded
14B	Ava silt loam, 1 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
14C3	Ava silty clay loam, 5 to 10 percent slopes, severely eroded	14C3	Ava silty clay loam, 5 to 10 percent slopes, severely eroded
138	Shiloh silty clay loam	138	Shiloh silty clay loam

CLAY COUNTY, ILLINOIS --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
337B	Creal silt loam, 1 to 5 percent slopes	337B	Creal silt loam, 2 to 5 percent slopes
434C2, 131C2	Ridgway silt loam, 5 to 10 percent slopes, eroded	434C2	Ridgway silt loam, 5 to 10 percent slopes, eroded
786D2, 514D2	Frondorf silt loam, 10 to 18 percent slopes, eroded	786D2	Frondorf silt loam, 10 to 18 percent slopes, eroded
786F, 761F, 514F	Frondorf silt loam, 18 to 35 percent slopes	786F	Frondorf silt loam, 18 to 35 percent slopes
801B	Orthents, silty, undulating	801B	Orthents, silty, undulating
810	Oil-waste land, brine damaged	810	Oil-waste land, brine damaged
871E, 821E	Lenzburg clay loam, 12 to 30 percent slopes, stony	871E	Lenzburg clay loam, 15 to 25 percent slopes, stony
887B2, 620B2	Darmstadt-Grantfork complex, 2 to 5 percent slopes, eroded	889B2	Darmstadt-Bluford complex, 2 to 5 percent slopes, eroded
912A, 620A	Hoyleton-Darmstadt complex, 0 to 2 percent slopes	912A	Darmstadt-Hoyleton complex, 0 to 2 percent slopes
912B2, 581B, 992B, 992B2	Hoyleton-Darmstadt complex, 2 to 5 percent slopes, eroded	912B2	Darmstadt-Hoyleton complex, 2 to 5 percent slopes, eroded
934C2, 914C2, 987C2, 888C2	Blair-Grantfork complex, 5 to 10 percent slopes, eroded	934C2	Blair-Grantfork complex, 5 to 10 percent slopes, eroded
967F	Hickory-Gosport complex, 18 to 35 percent slopes	967F	Hickory-Gosport complex, 18 to 35 percent slopes

CLAY COUNTY, ILLINOIS --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
991	Cisne-Huey complex	991	Cisne-Huey complex
1288	Petrolia silty clay loam, wet	1288	Petrolia silty clay loam, undrained
1420, 1422	Piopolis silty clay loam, wet	1420	Piopolis silty clay loam, undrained
3108	Bonnie silt loam, frequently flooded	3108	Bonnie silt loam, frequently flooded
3225	Holton silt loam, frequently flooded	3225	Holton silt loam, frequently flooded
3226, 3072, 3331	Wirt loam, frequently flooded	3226	Wirt loam, sandy substratum, frequently flooded
3288	Petrolia silty clay loam, frequently flooded	3288	Petrolia silty clay loam, frequently flooded
3333	Wakeland silt loam, frequently flooded	3333	Wakeland silt loam, frequently flooded
3334	Birds silt loam, frequently flooded	3334	Birds silt loam, frequently flooded
3382	Belknap silt loam, frequently flooded	3382	Belknap silt loam, frequently flooded
3420	Piopolis silty clay loam, frequently flooded	3420	Piopolis silty clay loam, frequently flooded
218	Newberry silt loam	4218	Newberry silt loam, ponded
7109	Racoon silt loam, rarely flooded	7109	Racoon silt loam, rarely flooded

(5) Series Established by This Correlation:

None

(6) Series Dropped or Made Inactive:

None

(7) Verification of Exact Cooperator Names:

The cooperators for the front cover, general soil map, and half title page are:

> "United States Department of Agriculture
> Soil Conservation Service
> in Cooperation with
> Illinois Agricultural Experiment Station"

The credits to be given on page *ii* of the published soil survey are as follows:

"This soil survey was made cooperatively by the Soil Conservation Service and the Illinois Agricultural Experiment Station. It is part of the technical assistance furnished to the Clay County Soil and Water Conservation District. The Illinois Department of Agriculture and the Clay County Board provided financial assistance for the survey."

(8) Prior Soil Survey publications

The first soil survey of Clay County was published in 1911. C.G. Hopkins, J.G. Mosier, J.H. Pettit, and J.E. Readhimer. *Clay County Soils. Soil Report No. 1.* University of Illinois - Agricultural Experiment Station. 32p.

This survey updates the first survey and provides additional information and larger maps that show soils in greater detail.

(9) Disposition of Field Sheets:

Field sheets and all map materials will be delivered to the map finishing unit at the state office by September 30, 1992.

(10) Instructions for Map Finishing:

Map finishing will be done in the map finishing unit at the Illinois State Office. The conversion legend in the final correlation report should be used for the conversion of all symbols that appear on compiled maps.

SCS-SOILS-37A
3-75

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

Soil Survey Area: Clay County
State: Illinois

Date: 7-92

CULTURAL FEATURES

BOUNDARIES

County or parish

Field sheet matchline & neatline

AD HOC BOUNDARY (label)

Small airport, airfield, park, oilfield, cemetery, or flood pool

STATE COORDINATE TICK
1 890 000 FEET

LAND DIVISION CORNERS (sections and land grants)

ROAD EMBLEMS & DESIGNATIONS

Interstate 66

Federal 287

State 52

RAILROAD use R.R. or RAILROAD

DAMS

Medium or small

WATER FEATURES

DRAINAGE

Perennial, single line

Intermittent

Drainage end

Canals or ditches

Drainage and/or irrigation

LAKES, PONDS AND RESERVOIRS

Perennial water w

MISCELLANEOUS WATER FEATURES

Marsh or swamp

Spring

Wet spot

SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SOIL SYMBOLS

ESCARPMENTS 2 3A

Bedrock (points down slope)

Other than bedrock (points down slope)

SHORT STEEP SLOPE

DEPRESSION OR SINK

SOIL SAMPLE SITE (normally not shown) S

MISCELLANEOUS

Gumbo, slick or scabby spot (sodic)

Rock outcrop (includes sandstone and shale)

Sandy spot

Severely eroded spot

RECOMMENDED AD HOC SOIL SYMBOLS

Oil-waste land

Note: Size of Miscellaneous Ad Hoc and Miscellaneous Water Features: 1 to 3 ac.

Revised 7-92

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND CLAY COUNTY, ILLINOIS

Guide for Use of Symbols:

Boundaries - use to show county line and to designate mapping area and matchline for adjoining atlas sheets

Ad hoc boundaries - use to show boundary of small airport, landfill, or cemetery, 3 acres or larger

State coordinate ticks - retain on mylars

Land division corners - use to show section corners

Roads - symbols for Interstate, Federal, and State roads shown

Railroad - use letters "R.R." to show location of active railroads

Dams - a. Small or medium - use to show dam when reservoir area is 3 to 40 acres in size

Drainage - a. Perennial (single line) - use to show streams that flow constantly except for periods of unusual drought

b. Intermittent - use to show streams 1,000 feet or more in length that are dry each year for extended periods, usually for more than three months

c. Drainage end - use to show direction, termination or dispersion of flow; for intermittent streams 1,000 feet or more in length

d. Drainage ditch - use to show dug channels of flow 1,000 feet or more in length; arrows show direction of flow; used mostly on flood plains of Little Wabash River and Big Muddy Creek

Lakes, ponds and reservoirs - use to show bodies of water 3 acres or larger; place a "w" or "water" on the water area shown

Clay County, Illinois
Conventional and Special Symbols Legend (page 2)

Marsh - use to show an area that is wet or continually flooded for extended periods, or for intermittent bodies of water; area is covered dominantly by hydrophilic vegetation; each symbol is for 1 to 3 acres

Spring - use to show an area of concentrated discharge of groundwater, which appears as a definite flow of water at the surface; each symbol is for 1 to 3 acres

Wet spot - use to show a low-lying area that is at least one drainage class wetter than the surrounding soils; does not pond water for brief periods; not used within map units of poorly drained or very poorly drained soils; each symbol is for 1 to 3 acres

Soil delineations and soil symbols - the soil survey map shows the boundary of a soil and the map unit symbol. The first number of a three part symbol indicates the soil type, the letter indicates the steepness of slope, and the last number indicates the degree of erosion. The soil type, the slope range, and the degree of erosion are given in the Soil Identification Legend. Note: the absence of a slope letter indicates a soil that occurs only on 0 to 2 percent slopes (nearly level or depressional). The absence of an erosion number indicates a soil that is uneroded or slightly eroded. The smallest soil delineation shown on soil maps will be 3 acres

Escarpments - a. Bedrock - use to show an area too narrow to delineate with a nearly vertical outcrop 660 feet or more in length

b. Other than bedrock - use to show an area too narrow to delineate with a sudden change in elevation of at least 15 feet and extending 660 feet or more. The slope is greater than 35 percent and the slope above and below is generally less than 15 percent.

Short steep slope - use to show a narrow, farmable area with a sudden change in elevation between 5 and 15 feet, and with slopes of 8 to 15 percent; generally represents a drop in elevation to a drainageway or flood plain, extends 660 feet or more

Depression - use to show a slightly depressional area that will pond water for brief periods; the soil is poorly or very poorly drained; each symbol is for 1 to 3 acres

Clay County, Illinois
Conventional and Special Symbols Legend (page 3)

Soil sample site - use to show location of typical pedons for series

Sodic spot - use to show an area of soil that has a high concentration of exchangeable sodium within 30 inches of the soil surface; indicated by poor soil tilth, high pH, or poor vegetative growth; use only within map units of soils that are not sodic or sodium-affected; each symbol is for 1 to 3 acres

Rock outcrop - use to show areas of exposed bedrock surrounded by deep or very deep soils; each symbol is for 1 to 3 acres

Sandy spot - use to show an area of soil that has a sandy surface texture and that is surrounded by a soil that has a loamy or finer surface texture; used mostly on flood plains; each symbol is for 1 to 3 acres

Severely eroded spot - use to show an area of soil where most or all of the original surface layer has been removed by erosion and the surrounding soil has not been eroded or is only moderately eroded; each symbol is for 1 to 3 acres

Oil-waste land - use to show an area of soil that has been severely damaged by the accumulation of oil brine, with or without liquid oily wastes; area is typically barren but may have a vegetative cover of salt tolerant plants; each area is 1 to 3 acres

(12) General Soil Map Units

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

Cisne-Hoyleton-Huey
Bluford-Hickory-Ava
Wakeland-Birds-Wirt
Bonnie-Belknap-Piopolis

(13) Certification Statement:

a. The field mapping was completed in 1990.

b. Clay County joins the following survey areas:

Effingham County (Published)
Fayette County (Modern survey completed, not published)
Jasper County (Modern survey completed, not published)
Marion County (Modern survey completed, not published)
Richland County (Published)
Wayne County (Modern survey completed, not published)

The joining has been checked for both the general soil map and the detailed soil maps. A detailed account of the join differences is on file in the state office as a part of the archived correlation records.

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

d. The location of all typical pedons in the survey area are correct and are within delineations using the reference name.

e. All typical pedons are classified according to *Soil Taxonomy*.

f. Soil maps are complete, accurate, and consistent.

CONVERSION LEGEND FOR CLAY COUNTY, ILLINOIS

Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
2	2	761F	786F				
3A	3A	786D2	786D2				
3B	3B	786F	786F				
3B2	3B2	801B	801B				
4B	4B	810	810				
4C2	4C2	821E	871E				
5C2	5C2	871E	871E				
5C3	5C3	887B2	889B2				
5D2	7D2	888C2	934C2				
5D3	7D3	912A	912A				
7C2	7C2	912B2	912B2				
7C3	7C3	914C2	934C2				
7D2	7D2	934C2	934C2				
7D3	7D3	967F	967F				
8D2	8D2	987C2	934C2				
8D3	8D3	991	991				
8E3	8F3	992B	912B2				
8F	8F	992B2	912B2				
8G	8G	1288	1288				
12	12	1420	1420				
13A	13A	1422	1420				
13B	13B	3072	3226				
13B2	13B2	3108	3108				
14B	14B	3225	3225				
14C2	14C2	3226	3226				
14C3	14C3	3288	3288				
31C2	5C2	3331	3226				
31C3	5C3	3333	3333				
131C2	434C2	3334	3334				
138	138	3382	3382				
218	4218	3420	3420				
287A	2	7109	7109				
337B	337B						
434C2	434C2						
514D2	786D2						
514F	786F						
551D2	8D2						
581B	912B2						
620A	912A						
620B2	889B2						

(15)

LEGEND OF MAP UNITS IN ALPHABETICAL SEQUENCE

Publication Symbol	Approved Map Unit Name
7D2	Atlas silt loam, 10 to 18 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
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
14C3	Ava silty clay loam, 5 to 10 percent slopes, severely eroded
3382	Belknap silt loam, frequently flooded
3334	Birds 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
934C2	Blair-Grantfork complex, 5 to 10 percent slopes, eroded
13A	Bluford silt loam, 0 to 2 percent slopes
13B	Bluford silt loam, 2 to 5 percent slopes
13B2	Bluford silt loam, 2 to 5 percent slopes, eroded
3108	Bonnie silt loam, frequently flooded
2	Cisne silt loam
991	Cisne-Huey complex
337B	Creal silt loam, 2 to 5 percent slopes
889B2	Darmstadt-Bluford complex, 2 to 5 percent slopes, eroded
912A	Darmstadt-Hoyleton complex, 0 to 2 percent slopes
912B2	Darmstadt-Hoyleton complex, 2 to 5 percent slopes, eroded
786D2	Frondorf silt loam, 10 to 18 percent slopes, eroded
786F	Frondorf silt loam, 18 to 35 percent slopes
8D3	Hickory clay loam, 10 to 18 percent slopes, severely eroded
8F3	Hickory clay loam, 18 to 35 percent slopes, severely eroded
8F	Hickory loam, 18 to 35 percent slopes
8G	Hickory loam, 35 to 60 percent slopes
8D2	Hickory silt loam, 10 to 18 percent slopes, eroded
967F	Hickory-Gosport complex, 18 to 35 percent slopes
3225	Holton silt loam, frequently flooded

Clay County -- Continued

Publication Symbol	Approved Map Unit Name
3A	Hoyleton silt loam, 0 to 2 percent slopes
3B	Hoyleton silt loam, 2 to 5 percent slopes
3B2	Hoyleton silt loam, 2 to 5 percent slopes, eroded
871E	Lenzburg clay loam, 15 to 25 percent slopes, stony
4218	Newberry silt loam, ponded
810	Oil-waste land, brine damaged
801B	Orthents, silty, undulating
3288	Petrolia silty clay loam, frequently flooded
1288	Petrolia silty clay loam, undrained
3420	Piopolis silty clay loam, frequently flooded
1420	Piopolis silty clay loam, undrained
7109	Racoon silt loam, rarely flooded
4B	Richview silt loam, 2 to 5 percent slopes
4C2	Richview silt loam, 5 to 10 percent slopes, eroded
434C2	Ridgway silt loam, 5 to 10 percent slopes, eroded
138	Shiloh silty clay loam
3333	Wakeland silt loam, frequently flooded
3226	Wirt loam, sandy substratum, frequently flooded
12	Wynoose silt loam

(16) CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

a. Laboratory Data from NSSL. SCS-SOI-8s completed.

Sampled As	Pedon Number	Symbol	Approved Name or Classification
Ava	90IL-025-10	14C2	Ava taxadjunct; fine-silty, mixed, mesic Typic Hapludalf; typical pedon
Birds	89IL-025-38	3334	Birds taxadjunct; coarse-silty, mixed, nonacid, mesic Typic Fluvaquent; inclusion in map unit
Bluford	89IL-025-14	13A	Bluford
Bluford	90IL-025-53	13A	Bluford
Bluford	90IL-025-57	13A	Bluford
Darmstadt	89IL-025-48	912A	Bluford; inclusion in map unit
Cisne	90IL-025-52	2	Cisne
Darmstadt	90IL-025-47	912A	Darmstadt taxadjunct; ESP >15% too shallow in profile for Darmstadt; fine-silty, mixed, mesic Typic Natraqualf; inclusion in map unit
Tamalco	89IL-025-51	912B2	Darmstadt taxadjunct; fine-silty, mixed, mesic Typic Natrudalf; inclusion in map unit
Frondorf	89IL-025-40	786D2	Frondorf
Unnamed	89IL-025-52	786F	Frondorf taxadjunct; fine-loamy, mixed, mesic Typic Hapludult; inclusion in map unit
Grantfork	89IL-025-33	934C2	Grantfork; typical pedon
Hickory	90IL-025-51	8F	Hickory
Holton	90IL-025-50	3225	Holton
Huey	90IL-025-12	991	Huey; typical pedon
Huey	89IL-025-28	991	Huey taxadjunct; fine-silty, mixed, mesic Albic Natraqualf; inclusion in map unit
Blair	90IL-025-07	5C2	Blair taxadjunct; fine-loamy, mixed, mesic Aquic Hapludalf; typical pedon

Laboratory Data from NSSL (continued)

Sampled As	Pedon Number	Symbol	Approved Name or Classification
Grantfork	89IL-025-22	934C2	Blair taxadjunct; fine-loamy, mixed, mesic Aquic Hapludalf
Hoyleton-Darmstadt	90IL-025-22	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-23	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-24	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-25	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-26	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-27	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-28	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-29	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-30	912A	Huey; inclusion in map unit
Hoyleton-Darmstadt	90IL-025-31	912A	Huey; inclusion in map unit
Hoyleton-Darmstadt	90IL-025-32	912A	Darmstadt taxadjunct; ESP >15% too shallow for Darmstadt; fine-silty, mixed, mesic Typic Natraqualf; inclusion in map unit
Hoyleton-Darmstadt	90IL-025-33	912A	Darmstadt; typical pedon
Hoyleton-Darmstadt	90IL-025-34	912A	Wynoose taxadjunct; fine-silty, mixed, mesic Typic Albaqualf; inclusion in map unit
Hoyleton-Darmstadt	90IL-025-35	912A pedon	Insufficient data to classify

Laboratory Data from NSSL (continued)

Sampled As	Pedon Number	Symbol	Approved Name or Classification
Hoyleton-Darmstadt	90IL-025-36	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-37	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-38	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-39	912A	Cisne taxadjunct; ESP >15% in lower part of subsoil; too deep to affect classification; inclusion in map unit
Hoyleton-Darmstadt	90IL-025-40	912A	Darmstadt
Hoyleton-Darmstadt	90IL-025-41	912A	Hoyleton taxadjunct; ESP >15% in lower part of profile; too deep to affect classification; inclusion in map unit
Hoyleton-Darmstadt	90IL-025-42	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-43	912A	Insufficient data to classify pedon
Hoyleton-Darmstadt	90IL-025-44	912A	Insufficient data to classify pedon
Cisne-Huey	91IL-025-4	991	Cisne taxadjunct; ESP >15% in lower part of profile; too deep to affect classification; inclusion in map unit
Cisne-Huey	91IL-025-5	991	Cisne taxadjunct; sodium affected, ESP of 12% in lower part of profile; ESP too low to affect classification; inclusion in map unit
Cisne-Huey	91IL-025-6	991	Cisne taxadjunct; sodium affected, ESP of 11% in lower part of profile; ESP too low to affect classification; inclusion in map unit

Laboratory Data from NSSL (continued)

Sampled As	Pedon Number	Symbol	Approved Name or Classification
Cisne-Huey	91IL-025-7	991	Huey taxadjunct; no natric horizon; fine-silty, mixed, mesic Typic Ochraqualf; inclusion in map unit
Cisne-Huey	91IL-025-8	991	Cisne
Cisne-Huey	91IL-025-9	991	Huey taxadjunct; fine, montmorillonitic, mesic Typic Natraqualf; inclusion in map unit
Cisne-Huey	91IL-025-10	991	Cisne taxadjunct; sodium-affected, ESP 5 to 7% in lower part of profile; fine, montmorillonitic, mesic Mollic Albaqualf; inclusion in map unit
Cisne-Huey	91IL-025-11	991	Newberry; inclusion in map unit
Cisne-Huey	91IL-025-12	991	Cisne
Cisne-Huey	91IL-025-13	991	Cisne
Cisne-Huey	91IL-025-14	991	Cisne
Cisne-Huey	91IL-025-15	991	Cisne
Cisne-Huey	91IL-025-16	991	Cisne
Cisne-Huey	91IL-025-17	991	Cisne taxadjunct; fine, montmorillonitic, mesic Mollic Ochraqualf; inclusion in map unit

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

Sampled As	Pedon Number	Symbol	Approved Name or Classification
Blair	89IL-025-46	5C2	Blair; inclusion in map unit
Cisne	73IL-025-004		Cisne
Cisne-Chauncey	73IL-025-001		Cisne variant
Grantfork	89IL-025-45	934C2	Coulterville; inclusion in map unit
Darmstadt	89IL-025-21	889B2	Darmstadt

Laboratory data from U of I -- Continued

Sampled As	Pedon Number	Symbol	Approved Name or Classification
Frondorf	89IL-025-49	786F	Frondorf taxadjunct; coarse-loamy, mixed, mesic Typic Dystrochrept; inclusion in map unit
Gosport	89IL-025-32	8D2	Gosport; inclusion in map unit
Gosport	89IL-025-42	967F	Gosport taxadjunct; Fine-silty, mixed, mesic Typic Eutrochrept; inclusion in map unit
Holton	89IL-025-41	3225	Holton
Hoyleton	71IL-025-002		Hoyleton
Hoyleton	89IL-025-50	3B2	Hoyleton
Huey	89IL-025-25	991	Huey
Huey	89IL-025-47	991	Huey taxadjunct; ESP > 15% too deep in profile for Huey; fine-silty, mixed, mesic Albic Natraqualf; inclusion in map unit
Tamalco-Huey	73IL-025-002		Tamalco
Tamalco	73IL-025-003		Tamalco
Tamalco	71IL-025-001		Tamalco taxadjunct

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

Sampled As	Pedon Number	Symbol	Approved Name or Classification
Ava	90IL-025-10	14C2	Ava taxadjunct; fine-silty, mixed, mesic Typic Hapludalf; typical pedon
Bluford	89IL-025-14	13A	Bluford
Cisne	90IL-025-52	2	Cisne
Darmstadt	90IL-025-47	912A	Darmstadt taxadjunct; ESP >15% too shallow in profile for Darmstadt; fine-silty, mixed, mesic Typic Natraqualf; inclusion in map unit
Hickory	90IL-025-51	8F	Hickory
Holton	90IL-025-50	3225	Holton
Huey	90IL-025-12	991	Huey; typical pedon

Notes of Accompany
Classification and Correlation
of the soils of Clay County, Illinois
by
Tonie J. Endres

SERIES	SYMBOL	PEDON NUMBER	SERIES/MAP UNIT
ATLAS	7C2	89IL-025-29	SERIES
	7C3	89IL-025-06	MAP UNIT
	7D2	89IL-025-39	MAP UNIT
	7D3	89IL-025-36	MAP UNIT
AVA	14B	90IL-025-64	MAP UNIT
	14C2	90IL-025-10	SERIES
	14C3	90IL-025-90	MAP UNIT

These soils are taxadjuncts to the series because of secondary structure that allows rooting, 2 to 4 inches apart, in the 2Btx horizon. They are fine-silty, mixed, mesic Typic Hapludalfs.

BELKNAP	3382	88IL-025-02	BOTH
BIRDS	3334	91IL-025-01	BOTH
BLAIR	5C2	90IL-025-07	SERIES
	5C3	90IL-025-62	MAP UNIT
	934C2	90IL-025-65	MAP UNIT

These soils are taxadjuncts to the series because of content of fine sand and coarser in the control section. They are fine-loamy, mixed, mesic Aquic Hapludalfs.

BLUFORD	13A	89IL-025-55	SERIES
	13B	90IL-025-11	MAP UNIT
	13B2	90IL-025-02	MAP UNIT
	889B2	92IL-025-19	MAP UNIT

The Bluford soils in the 13A map unit have a thinner 2Btx horizon than defined for the series. The Bluford soils in the 889B2 map unit lack a horizon with fragipan characteristics and are less acid in the Bt2 and 2Btg3 horizon than defined for the Bluford series.

BONNIE	3108	90IL-025-68	BOTH
CISNE	2	89IL-025-11	SERIES
	991	89IL-025-24	MAP UNIT
CREAL	337B	90IL-025-82	BOTH
DARMSTADT	889B2	90IL-025-61	MAP UNIT
	912A	90IL-025-33	SERIES
	912B2	90IL-025-75	MAP UNIT
FRONDORF	786D2	90IL-025-70	SERIES
	786F	89IL-025-52	MAP UNIT

The Frondorf series have soft bedrock (a paralithic contact, described as a Cr horizon) below the solum. The tables will be adjusted to show changes in data values where appropriate. The Frondorf soils in the 786F map unit are taxadjuncts to the series because base saturation immediately above the paralithic contact is lower than defined for the Frondorf series. They are fine-loamy, mixed, mesic Typic Hapludults.

GOSPORT	967F	91IL-025-03	BOTH
GRANTFORK	934C2	89IL-025-33	BOTH

SERIES	SYMBOL	PEDON NUMBER	SERIES/MAP UNIT
HICKORY	8D2	89IL-025-05	MAP UNIT
	8D3	89IL-025-13	MAP UNIT
	8F	89IL-025-16	SERIES
	8F3	89IL-025-35	MAP UNIT
	8G	90IL-025-01	MAP UNIT
	967F	91IL-025-02	MAP UNIT

The Hickory soils in the 8G and 967F map units are less acid in the lower part of the Bt horizon than defined for the Hickory series.

HOLTON	3225	88IL-025-08	BOTH
HOYLETON	3A	89IL-025-04	SERIES
	3B	90IL-025-13	MAP UNIT
	3B2	87IL-025-02	MAP UNIT
	912A	90IL-025-59	MAP UNIT
	912B2	90IL-025-74	MAP UNIT

The Hoyleton soils in the 912A map unit are less acid in the 2Btg and 2BCg horizon than defined for the Hoyleton series. The Hoyleton soils in the 912B2 map unit are less acid in the 2BC horizon and have less than 30 inches of loess as defined for the series.

HUEY	991	90IL-025-12	BOTH
LENZBURG	871E	90IL-025-80	BOTH
NEWBERRY	4218	90IL-025-21	BOTH
ORTHENTS	801B	89IL-025-17	MAP UNIT
PETROLIA	1288	90IL-025-84	MAP UNIT
	3288	90IL-025-83	SERIES
PIOPOLIS	1420	88IL-025-10	MAP UNIT
	3420	90IL-025-67	SERIES
RACOON	7109	90IL-025-14	BOTH
RICHVIEW	4B	90IL-025-17	SERIES
	4C2	90IL-025-58	MAP UNIT
RIDGWAY	434C2	90IL-025-76	BOTH
SHILOH	138	90IL-025-19	BOTH
WAKELAND	3333	90IL-025-86	BOTH
WIRT	3225	90IL-025-73	BOTH
WYNOOSE	12	89IL-025-15	BOTH

(18) CLASSIFICATION OF THE SOILS

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

Soil name	Family or higher taxonomic class
Atlas------	Fine, montmorillonitic, mesic, sloping Aeric Ochraqualfs
*Ava--------	Fine-silty, mixed, mesic Typic Fragiudalfs
Belknap----	Coarse-silty, mixed, acid, mesic Aeric Fluvaquents
Birds------	Fine-silty, mixed, nonacid, mesic Typic Fluvaquents
*Blair------	Fine-silty, mixed, mesic Aquic Hapludalfs
Bluford----	Fine, montmorillonitic, mesic Aeric Ochraqualfs
Bonnie-----	Fine-silty, mixed, acid, mesic Typic Fluvaquents
Cisne------	Fine, montmorillonitic, mesic Mollic Albaqualfs
Creal------	Fine-silty, mixed, mesic Aeric Ochraqualfs
Darmstadt--	Fine-silty, mixed, mesic Albic Natraqualfs
Frondorf---	Fine-loamy, mixed, mesic Ultic Hapludalfs
Gosport----	Fine, illitic, mesic Typic Dystrochrepts
Grantfork--	Fine-loamy, mixed, mesic, sloping Aeric Ochraqualfs
Hickory----	Fine-loamy, mixed, mesic Typic Hapludalfs
Holton-----	Coarse-loamy, mixed, nonacid, mesic Aeric Fluvaquents
Hoyleton---	Fine, montmorillonitic, mesic Aquollic Hapludalfs
Huey-------	Fine-silty, mixed, mesic Typic Natraqualfs
Lenzburg---	Fine-loamy, mixed (calcareous), mesic Typic Udorthents
Newberry---	Fine-silty, mixed, mesic Mollic Ochraqualfs
Orthents---	Fine-silty, mixed, mesic, Udorthents
Petrolia---	Fine-silty, mixed, nonacid, mesic Typic Fluvaquents
Piopolis---	Fine-silty, mixed, acid, mesic Typic Fluvaquents
Racoon-----	Fine-silty, mixed, mesic Typic Ochraqualfs
Richview---	Fine-silty, mixed, mesic Mollic Hapludalfs
Ridgway----	Fine-silty, mixed, mesic Typic Hapludalfs
Shiloh-----	Fine, montmorillonitic, mesic Cumulic Haplaquolls
Wakeland---	Coarse-silty, mixed, nonacid, mesic Aeric Fluvaquents
Wirt-------	Coarse-loamy, mixed, nonacid, mesic Typic Udifluvents
Wynoose----	Fine, montmorillonitic, mesic Typic Albaqualfs

(19)
Approval Signature and Date.

Correlation Approved:

Robert L. McLeese 2/26/93

ROBERT L. MCLEESE Date
State Soil Scientist

Charles Whitmore 2/26/93

CHARLES WHITMORE Date
State Conservationist