

Correlator's Copy

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
301 North Randolph Street
Champaign, Illinois 61820

Classification and Correlation
of the Soils of
Hamilton County, Illinois
November 1981

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and R 2 north in.*

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This correlation was prepared by J. Wiley Scott, Assistant State Soil Scientist. Preliminary work in reviewing typical pedons was done by progressive correlation. Some of the work on the field correlation was done at the final field review in October 1981. Survey Leader Bruce Currie prepared additional documentation after that review and forwarded it to the state office. The decisions in this field correlation are based upon reports of field review, field notes, laboratory data, soil correlation samples, the draft of the manuscript, and the compiled soil maps.

A set of forms SCS-SS-6 accompanies this correlation memorandum. They will be used to order tables for the manuscript soon after the correlation conference.

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 these 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 that it is severely eroded.

<u>Field Symbols</u>	<u>Field Map Unit Name</u>	<u>Recommended Symbol</u>	<u>Recommended Map Unit Name</u>
2	Cisne silt loam	) 2	Cisne silt loam
3B	Hoyleton silt loam, 1 to 5 percent slopes, eroded	) 3B)	Hoyleton silt loam, 1 to 5 percent slopes, eroded <i>He.</i>
8E2 8E	Hickory silt loam, 15 to 20 percent slopes, eroded	) 8E2)	Hickory silt loam, 15 to 20 percent slopes, eroded
8E3	Hickory loam, 15 to 22 percent slopes, severely eroded	) 8E3))	Hickory loam, 15 to 22 percent slopes, severely eroded
8F	Hickory loam, 20 to 35 percent slopes	) 8F)	Hickory loam, 20 to 35 percent slopes
12 165	Wynoose silt loam	) 12)	Wynoose silt loam <i>Wynoose</i>
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, 3 to 6 percent slopes, eroded	) 13B2)	Bluford silt loam, 3 to 6 percent slopes, eroded
14B	Ava silt loam, 1 to 5 percent slopes	) 14B)	Ava silt loam, 1 to 5 percent slopes
14B2	Ava silt loam, 2 to 5 percent slopes, eroded	) 14B2)	Ava silt loam, 2 to 5 percent slopes, eroded
14C2	Ava silt loam, 5 to 10 percent slopes, eroded	) 14C2)	Ava silt loam, 5 to 10 percent slopes, eroded
14C3 13C3	Ava silt loam, 5 to 10 percent slopes, severely eroded	) 14C3))	Ava silt loam, 5 to 10 percent slopes, severely eroded
14D3 14D2	Ava silt loam, 10 to 18 percent slopes, severely eroded	) 14D3))	Ava silt loam, 10 to 18 percent slopes, severely eroded
72	Sharon silt loam	) 72	Sharon silt loam
108	Bonnie silt loam	) 108	Bonnie silt loam
109 <i>121 165</i>	Raccoon silt loam <i>Wynoose sp Kesh</i>	) 109	Raccoon silt loam

<u>Field Symbols</u>	<u>Field Map Unit Name</u>	<u>Recommended Symbol</u>	<u>Recommended Map Unit Name</u>
173A	McGary silt loam, 0 to 3 percent slopes	) 173A)	McGary silt loam, 0 to 3 percent slopes
288	Petrolia silty clay loam	) 288	Petrolia silty clay loam
301B2 214B2	Grantsburg silt loam, 2 to 5 percent slopes, eroded	) 301B2)	Grantsburg silt loam, 2 to 5 percent slopes, eroded
301C2 214C2	Grantsburg silt loam, 5 to 12 percent slopes, eroded	) 301C2)	Grantsburg silt loam, 5 to 12 percent slopes eroded
301C3 214C3	Grantsburg silt loam, 5 to 12 percent slopes, severely eroded	) 301C3)	Grantsburg silt loam, 5 to 12 percent slopes, severely eroded
337	Creal silt loam	) 337	Creal silt loam
339E	Wellston silt loam, 15 to 20 percent slopes	) 339E)	Wellston silt loam, 15 to 20 percent slopes
339F	Wellston silt loam, 20 to 35 percent slopes	) 339F)	Wellston silt loam, 20 to 35 percent slopes
340C3	Zanesville silt loam, 5 to 10 percent slopes, severely eroded	) 340C3)	Zanesville silt loam, 5 to 10 percent slopes, severely eroded
340D2 214D2	Zanesville silt loam, 10 to 18 percent slopes, eroded	) 340D2)	Zanesville silt loam, 10 to 18 percent slopes, eroded
340D3	Zanesville silt loam, 10 to 18 percent slopes, severely eroded	) 340D3)	Zanesville silt loam, 10 to 18 percent slopes, severely eroded
382	Belknap silt loam	) 382	Belknap silt loam
404	Titus silty clay loam	) 404	Titus silty clay loam
420	Piopolis silty clay loam	) 420	Piopolis silty clay loam
444 422	Bungay silty clay	) 444	Bungay silty clay ?
467B2 467C3 173B2	Markland silt loam, 2 to 5 percent slopes, eroded	) 467B2))	Markland silt loam, 2 to 5 percent slopes, eroded
524 444 442	Zipp silty clay	) 524	Zipp silty clay

<u>Field Symbols</u>	<u>Field Map Unit Name</u>	<u>Recommended Symbol</u>	<u>Recommended Map Unit Name</u>
524+	Zipp silt loam, overwash	) 524+	^{V FSL} Zipp silt loam, overwash
786E	Frondorf silt loam, 12 to 20 percent slopes	) 786E	Frondorf silt loam, 12 to 20 percent slopes
786F	Frondorf silt loam, 20 to 35 percent slopes	) 786F	Frondorf silt loam, ¹⁵ 20 to 35 percent slopes
787	Banlic silt loam	) 787	Banlic silt loam
801E	Orthents, silty, moderately steep	) 801E	Orthents, silty, moderately steep
929D3 929D2	Ava-Hickory complex, 10 to 18 percent slopes, severely eroded	) 929D3	Ava-Hickory complex, 10 to 18 percent slopes, severely eroded

Series Established by This Correlation:

Bungay (Hamilton County, Illinois)

Series Dropped or Made Inactive:

None

Certification Statement:

The state soil scientist certifies that:

(1) Mapping was completed in June 1981.

(2) The joining has been checked for both the general soil map and the detailed maps. Saline County is the only modern soil survey adjacent to Hamilton County. A join has been achieved on the general soil map except for some cartographic detail near the Middle Fork of the Saline River and one of its tributaries. The Belknap-Bonnie Association is mapped on the flood plain in Hamilton County, adjacent to the main channel of the Middle Fork, but Saline County shows the Ava-Bluford-Hickory Association. Saline County shows the Belknap-Banlic-Bonnie Association to the east along a tributary stream at the county line.

On the detailed soil maps, the following delineations that join at the Hamilton-Saline County line that have unlike map symbols are listed and the differences are explained:

<u>Hamilton County</u>	<u>Saline County</u>	<u>Explanation</u>
12 Wynoose silt loam	165 Weir silt loam	Weir soils were included with Wynoose soils in Hamilton Co. because of small acreage. Weir soils lack an abrupt textural change defined for Albaqualfs.
173A McGary silt loam 0 to 3 percent slopes	482A Uniontown silt loam, 0 to 2 percent slopes. 482B Uniontown silt loam, 2 to 6 percent slopes 338 Hurst silt loam	There are less than 1000 acres of these terrace soils in Hamilton Co. Slopes steeper than 3 percent, soils deeper to free carbonates, and soils that lack gray mottles so high in the solum are inclusions in 173A
337 Creal silt loam	723 Reesville silt loam	Reesville soils were not extensive enough to set up a map unit in Hamilton Co. The soils are similar except for depth to free carbonates.

<u>Hamilton County</u>	<u>Saline County</u>	<u>Explanation</u>
340D2 Zanesville silt loam, 10 to 18 percent slopes, eroded	340E3 Zanesville silt loam, 12 to 18 percent slopes, severely eroded	Slopes overlap significantly. The land use differs, in Hamilton County this delineation is timbered and not severely eroded.
420 Piopolis silty clay loam	338 Hurst silt loam	Hurst soils were not mapped in Hamilton Co. These acid soils are lower than most terrace soils in Hamilton Co., and interpretations for Piopolis fit better than those for McGary. <i>Soils similar to Hurst are included with McGary soils in Hamilton Co.</i>
801E Orthents, silty, moderately steep	382 Belknap silt loam	These are sediments dredged from the North Fork Saline River. The ditch was not dredged at the time Saline Co. was mapped.
<i>467B2 Markland silt loam, 2 to 5 percent slopes, eroded.</i>	<i>122B Colp silt loam, 1 to 4 percent slopes.</i>	<i>Colp soils were not mapped in Hamilton Co. because of small acreage, they lack free carbonates within a depth of 40 inches.</i>

(3) The interpretations have been coordinated and agree with those on the interpretations records.

(4) The location of the typical pedons of the soil series used in this survey area have been checked against the soil maps and are located in mapped areas of the named soil. The legal descriptions are correct. The location will be marked on soil maps by standard spot symbols for soil sample area.

Verification of Exact Cooperator Names:

Front cover, general soil map, and half title page:

UNITED STATES DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE
 IN COOPERATION WITH
 ILLINOIS AGRICULTURAL EXPERIMENT STATION

This survey was made cooperatively by the Soil Conservation Service and the Illinois Agricultural Experiment Station. It is part of the technical assistance provided to the Hamilton County Soil and Water Conservation District. The cost was shared by the Hamilton County Board of Supervisors. This soil survey is Illinois Agricultural Experiment Station Soil Report No. 120.

Disposition of Field Sheets:

The soil maps have been compiled on halftone film positive atlas sheets at a scale of 1:15,840. They have been joined and color checked for accuracy. The compiled maps are in the map finishing unit at the Illinois state office. The original field sheets (kind 1594) are in the Hamilton County office, but will be forwarded to the map finishing unit in December 1981 for reference and storage.

Prior Soil Survey Publications:

None

Miscellaneous Items:

Three soil series remain to be updated and circulated as initial review drafts as of the date of the field correlation.

Instructions for Map Finishing;

During map finishing the following map symbols need to be converted:

<u>Compilation Map Symbol</u>	<u>Finished Map Symbol</u>
8E	8E2
13C3	14C3
14D2	14D3
165	12
173B2	467B2
214B2	301B2
214C2	301C2
214C3	301C3
214D2 → 422	→ 444 340D2
→ 444	→ 524
→ 467C3	→ 467B2 524
786E → 929D2	→ 786F 929D3

Farm ponds are an important source of water supply in Hamilton County and should be shown on the finished maps, but if they are too small to place the symbol "w" inside, they should be left off.

↳ the delineation,

Spot symbols for severely eroded spots will be drafted on the finished maps in areas previously mapped 467C3.

