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**CLASSIFICATION AND CORRELATION**

**OF**

**THE SOILS OF**

**VANDERBURGH COUNTY**

**INDIANA**

---

**DECEMBER 1972**

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U.S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
MIDWEST REGIONAL TECHNICAL SERVICE CENTER  
LINCOLN, NEBRASKA

USDA-SCS-LINCOLN, NEBR. 1972

*Amend #1 1/9/73*

UNITED STATES DEPARTMENT OF AGRICULTURE  
Soil Conservation Service  
Midwest Regional Technical Service Center  
Lincoln, Nebraska 68508

Classification and Correlation

of the Soils of

Vanderburgh County, Indiana

This correlation was prepared by Robert I. Turner in consultation with Leo A. Kelly, party leader, and F. W. Sanders during the week of May 8-12, 1972. W. Lynn, Lincoln Soil Survey Lab, reviewed the engineering interpretations for the soils used in this soil survey. The final correlation is based on the first draft of the manuscript, field correlation and notes, correlation samples, and some laboratory data. Mr. Turner also participated in the final field review during the week of November 29 - December 3, 1971.

Symbol	Field Name	Approved Name	Manuscript Map Symbol*
554B2	Alford silt loam, 2-6% slopes, eroded	) Alford silt loam, ) 2 to 6 percent slopes, eroded	A1B2
554C2	Alford silt loam, 6-12% slopes, eroded	) Alford silt loam, ) 6 to 12 percent slopes, eroded	A1C2
554D2	Alford silt loam, 12-18% slopes, eroded	) )	
554C3	Alford silt loam, 6-12% slopes, severely eroded	) Alford silt loam, ) 6 to 12 percent slopes, ) severely eroded	A1C3
554D3	Alford silt loam, 12-18% slopes, severely eroded	) Alford silt loam ) 12 to 18 percent slopes, ) severely eroded	A1D3
712	Bartle silt loam	Bartle silt loam	Ba
71	Birds silt loam	Birds silt loam	Bd

\* The first capital letter is the initial one of the soil name. The lower case letter that follows separates mapping units having names that begin with the same letter except that it does not separate sloping or eroded phases. The second capital letter indicates the class of slope. Symbols without a slope letter are those with a slope range of 0 to 2 percent or they are for land types with a considerable range of slope. A final number 2 or 3 in the symbol indicates that the soil is eroded or severely eroded respectively.

Symbol	Field Name	Approved Name	Manuscript Map Symbol
91	Bonnie silt loam	) Bonnie silt loam	Bo
717	Vincennes silt loam	)	
BA	Borrow areas	Borrow pits	Br
897	Evansville silt loam	) Evansville silt loam	Ev
897d	Evansville overwash phase	)	
898d	Patton overwash phase	)	
721	Ginat silt loam	Ginat silt loam	Gn
10	Gullied land	Gullied land	Gu
892	Henshaw silt loam	Henshaw silt loam	He
564A1	Hosmer silt loam, 0-2% slopes	) Hosmer silt loam, ) 0 to 2 percent slopes	HoA
564B2	Hosmer silt loam, 2-6% slopes, eroded	) Hosmer silt loam, ) 2 to 6 percent slopes, eroded	HoB2
564B3	Hosmer silt loam, 2-6% slopes, severely eroded	) Hosmer silt loam, ) 2 to 6 percent slopes, ) severely eroded	HoB3
564C2	Hosmer silt loam, 6-12% slopes, eroded	) Hosmer silt loam, ) 6 to 12 percent slopes, eroded	HoC2
564D2	Hosmer silt loam, 12-18% slopes, eroded	)	
564C3	Hosmer silt loam, 6-12% slopes, severely eroded	) Hosmer silt loam, ) 6 to 12 percent slopes, ) severely eroded	HoC3
564D3	Hosmer silt loam, 12-18% slopes, severely eroded	) Hosmer silt loam, ) 12 to 18 percent slopes, ) severely eroded	HoD3
54	Huntington silty clay loam	) Huntington silty clay loam )	Ht
6054	Huntington fine sandy loam, sandy variant (0-2% slopes)	) Huntington fine sandy loam, ) sandy variant )	Hu
853A1	Iona silt loam, 0-2% slopes	) Iona silt loam, 0 to 2 percent ) slopes	IoA
853B2	Iona silt loam, 2-6% slopes, eroded	) Iona silt loam, ) 2 to 6 percent slopes, eroded	IoB2

Symbol	Field Name	Approved Name	Manuscript Map Symbol
552	Iva silt loam	Iva silt loam	Iv
53	Lindside silty clay loam	Lindside silty clay loam	Ln
1	Made land	Made land	Ma
254B2	Markland silt loam, 2-6% slopes, eroded	) Markland silt loam, ) 2 to 6 percent slopes, eroded	MkB2
254C2	Markland silt loam, 6-18% slopes, eroded	) Markland silt loam, ) 6 to 18 percent slopes, eroded	MkC2
254C3	Markland silty clay loam, 6-18% slopes, severely eroded	) Markland silty clay loam, ) 6 to 18 percent slopes, ) severely eroded	M1C3
894C3	Uniontown	)	
252	McGary silt loam	McGary silt loam	Mr
553A1	Muren silt loam, 0-2% slopes	) Muren silt loam, ) 0 to 2 percent slopes	MuA
553B2	Muren silt loam, 2-6% slopes, eroded	) Muren silt loam ) 2 to 6 percent slopes, eroded	MuB2
52	Newark silty clay loam	Newark silty clay loam	Nw
898	Patton silty clay loam	Patton silty clay loam	Pa
544B1	Princeton fine sandy loam, 2-6% slopes	) Princeton fine sandy loam, ) 2 to 6 percent slopes	PrB
544A1	Princeton	)	
544B2	Princeton	)	
544C1	Princeton	)	
858	Ragsdale silt loam	Ragsdale silt <del>loam</del> loam	Ra
62	Rahm silty clay loam	Rahm silty clay loam	Rh
852	Reesville silt loam, 0-2% slopes	) Reesville silt loam )	Rs
723A1	Sciotoville silt loam, 0-2% slopes	) Sciotoville silt loam, ) 0 to 2 percent slopes	ScA
723B2	Sciotoville silt loam, 2-6% slopes, eroded	) Sciotoville silt loam, ) 2 to 6 percent slopes, eroded	ScB2
92	Stendal silt loam	Stendal silt loam	St

Symbol	Field Name	Approved Name	Manuscript Map Symbol
894B2 894C2	Uniontown silt loam, 2-6% slopes, eroded	) Uniontown silt loam, ) 2 to 6 percent slopes, eroded	UnB2
72	Wakeland silt loam	Wakeland silt loam	Wa
722	Weinbach silt loam	Weinbach silt loam	Wb
674D2	Wellston silt loam, 12-18% slopes, eroded	) Wellston silt loam, ) 12 to 18 percent slopes, eroded	WeD2
674D3	Wellston silt loam, 12-18% slopes, severely eroded	) Wellston silt loam, ) 12 to 18 percent slopes, ) severely eroded	WeD3
674E2 674E3	Wellston silt loam, 18-25% slopes, eroded Wellston silt loam, 18-25% slopes, severely eroded	) Wellston silt loam, ) 18 to 25 percent slopes, eroded ) (Add one severe erosion spot ) symbol for each 5 acres or each ) delineation whichever is smaller to delineations of 674E3)	WeE2
676F1	Wellston silt loam, 25-50% slopes	) Wellston silt loam, ) 25 to 50 percent slopes	WeF
5724A1 724A1	Wheeling loam, 0-2% slopes Wheeling silt loam, 0-2% slopes	) Wheeling loam, ) 0 to 2 percent slopes ) )	WhA
5724B2 724B2 724C2 724C3	Wheeling loam, 2-6% slopes, eroded Wheeling silt loam, 2-6% slopes, eroded	) Wheeling loam, ) 2 to 6 percent slopes, eroded ) ) )	WhB2
73 93	Wilbur silt loam Steff silt loam (0-2% slopes)	) Wilbur silt loam ) )	Wm
63	Woodmere silty clay loam	Woodmere silty clay loam	Wo
664C2	Zanesville silt loam, 6-12% slopes, eroded	) Zanesville silt loam, ) 6 to 12 percent slopes, eroded	ZaC2
664C3	Zanesville silt loam, 6-12% slopes, severely eroded	) Zanesville silt loam, ) 6 to 12 percent slopes, ) severely eroded	ZaC3
664D2	Zanesville silt loam, 12-18% slopes, eroded	) Zanesville silt loam, ) 12 to 18 percent slopes, eroded	ZaD2

Vanderburgh County, Indiana

5.

Symbol	Field Name	Approved Name	Manuscript Map Symbol
664D3	Zanesville silt loam, 12-18% slopes, severely eroded	) Zanesville silt loam, ) 12 to 18 percent slopes, ) severely eroded	ZaD3
257	Zipp silty clay	Zipp silty clay	Zp

Series established by this correlation:

Evansville

Series dropped or made inactive as a result of this correlation:

None

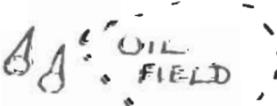
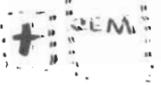
Field sheets for Vanderburgh County Soil Survey have been joined with Henderson County, Kentucky, except for minor differences. Egan soils in Henderson County, Kentucky, join Huntington soils in Vanderburgh County. The soils are similar, except Egan soils have thinner A horizons and were too small in extent to recognize in Vanderburgh County.

Series interpretations have been prepared for all series of the survey originating in Indiana. These have been circulated to the surrounding states for comments. Indiana has also prepared series interpretative material for soil series that have type locations outside Indiana. These have also been reviewed by states with the type location for the series. All series interpretations need to be reviewed critically and transferred to the approved format.

Instructions for Map Compilation:

Show special and spot symbols as indicated on enclosed legend. Use standard symbols as shown on Guide for Soil Map Compilation on Photobase Map Sheets, SCS, dated August 1970.

Vanderburgh County, Indiana

<u>Field Sheet Symbol</u>	<u>Description</u>	<u>Manuscript Symbol</u>
<u>HIGHWAYS AND ROADS:</u>		
	Divided (wide or variable median)	<u>1/</u> 
	Good motor	<u>1/</u> 
	Poor motor	<u>1/</u> 
<u>RAILROADS:</u>		
	Single track	
	Double track	
	Abandoned	
<u>BUILDINGS AND SIMILAR FEATURES:</u>		
	Farmstead, house (not shown in urban areas)	
	Church (to scale, if large)	
	School (to scale, if large)	
	Airport (small)	
	Wells, oil or gas; field (label)	
	Indian mound (label)	
<u>BOUNDARIES:</u>		
	National, state, province	
	County	
	Cemetery	
	Soil survey area	
<u>DRAINAGE FEATURES:</u>		
	Streams, double-line:	
	Perennial	

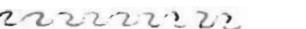
1/ Listed for explanatory purposes only - not on all field sheets in County. Roads are classified on an updated county map which will accompany the soil survey field sheets for compilation.

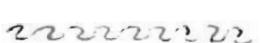
Signs and Symbols: (con'd)

Field Sheet Symbol                      Description    Manuscript Symbol

DRAINAGE FEATURES: (con'd)

Streams, single-line

	Perennial	
	Intermittent	
	Crossable with tillage implements	
	Not crossable with tillage implements	

 Gully 

 Drainage end or alluvial fan 

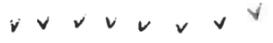
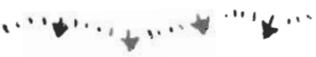
Canals or ditches

	Single-line	
	Double-line, abandoned (label)	

Lakes, ponds, and reservoirs

	Perennial	
	Wet spot	

RELIEF FEATURES:

	Escarpments	
	Bedrock	
	Other than bedrock	
	Quarry, mine	
	Levee (ticks on water side)	

SPECIAL SOIL SYMBOLS:

Outcrops	Rock	
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Signs and Symbols: (con'd)

<u>Field Sheet Symbol</u>	<u>Description</u>	<u>Manuscript Symbol</u>
<u>SPECIAL SOIL SYMBOLS: (con'd)</u>		
+	Saline or alkali spot (show smaller than section corner)	+
⋯	Sand spot, area	⋯
=	Severely eroded spot	=

Approved: December 5, 1972


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 Maurice Stout, Jr.  
 Principal Soil Correlator  
 Midwest Region

## SOIL SURVEY CONVERSION LEGEND

RELATING FIELD SYMBOLS TO PUBLICATION SYMBOLS FOR

VANDERBURGH COUNTY, INDIANA

Field Sheet Symbols	Correlated Manuscript Map Symbol	Field Sheet Symbols	Correlated Manuscript Map Symbol
BA	Br	674D3	WeD3
1	Ma	674E2	WeE2
10	Gu	674E3	WeE2
52	Nw	676F1	WeF
53	Ln	712	Ba
54	Ht	717	Bo
62	Rh	721	Gn
63	Wo	722	Wb
71	Bd	723A1	ScA
72	Wa	723B2	ScB2
73	Wm	724A1	WhA
91	Bo	724B2	WhB2
92	St	724C2	WhB2
93	Wm	724C3	WhB2
252	Mr	852	Rs
254B2	MkB2	853A1	IoA
254C2	MkC2	853B2	IoB2
254C3	M1C3	858	Ra
257	Zp	892	He
544A1	PrB2	894B2	UnB2
544B1	PrB2	894C2	UnB2
544B2	PrB2	894C3	M1C3
544C1	PrB2	897	Ev
552	Iv	897d	Ev
552A1	MuA	898	Pa
553B2	MuB2	898d	Ev
554B2	A1B2	5724A1	WhA
554C2	A1C2	5724B2	WhB2
554C3	A1C3	6054	Hu
554D2	A1C2		
554D3	A1D3		
564A1	HoA		
564B2	HoB2		
564B3	HoB3		
564C2	HoC2		
564C3	HoC3		
564D2	HoC2		
564D3	HoD3		
664C2	ZaC2		
664C3	ZaC3		
664D2	ZaD2		
664D3	ZaD3		
674D2	WeD2		

## CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSES

Engineering Test Data  
Purdue University

<u>Sampled as</u>	<u>Sample No.</u>	<u>Lab Nos.</u>	<u>Classification</u>
Huntington	S71IN82-2(1-3)	--*	Huntington series
Zipp	S71IN82-1(1-5)	--	Zipp series
Weinbach	S71IN82-3(1-7)	--	Weinbach series
Sciotoville	S71IN82-4(1-3)	--	Sciotoville series

## Purdue University Lab. Data

<u>Sampled as</u>	<u>Sample No.</u>	<u>Lab No.</u>	<u>Classification</u>
Huntington	S70IN82-1(1-4)	1 - 4	Huntington series
Woodmere	S70IN82-2(1-5)	5 - 9	Woodmere series
Evansville	S70IN82-3(1-6)	10 - 15	Evansville series
Huntington	S70IN82-4(1-4)	16 - 19	Huntington series

\* Engineering Test Data is not available yet and Lab Sample numbers have not been assigned.

Notes to Accompany  
Classification and Correlation  
of the Soils of  
Vanderburgh County, Indiana

by  
Robert I. Turner

1. HUNTINGTON SERIES

The soils in this survey area typically have light silty clay loam textures and are marginal to the appropriate texture range for the Armiesburg series. Because of the historical use of Huntington soils along the Ohio River in past correlations in Indiana and some indication that these soils are higher in available phosphate than are Armiesburg soils, we are continuing the use of the Huntington series in this survey.

2. IONA SERIES

Iona soils in this survey area have sola which are on the thickest part of the range for the series and likewise for depth to free carbonates. Medium acid as the most acid part of the B horizon with slightly acid reaction within about 2 feet depth and neutral reaction at 3 feet and free carbonates at about 40 inches depth argued against including with the Muren series.

3. PATTON SERIES

The Patton soils in this survey area have very minimal mollic epipedons in terms of thickness and organic matter content.

4. PRINCETON SERIES

A small acreage of soils marginal to coarse-loamy were correlated as Princeton more as a matter of convenience. This unit is quite variable and will be described in the soil survey manuscript.

5. REESVILLE SERIES

Reesville soils in this survey area are well within the definition of the series as being formulated by states using the series.

6. SCIOTOVILLE SERIES

The soils in this survey are taxadjuncts to the Sciotoville series because they have fine-silty control sections. The Sciotoville soils are presently defined as having fine-loamy control sections although the evidence for such a classification is marginal.

7. UNIONTOWN SERIES

The Uniontown soils of this survey area are consistent with past use of the Uniontown series in Indiana and come within the present range of the series (yellow 7-70) although the solum of the representative pedon is on the thickest part of the range for the series.

8. WELLSTON SERIES

A small acreage of severely eroded Wellston soils were combined with the eroded Wellston unit on 18 to 25 percent slopes as an inclusion. These areas will be identified with a spot symbol and discussed in the mapping unit description.

9. WHEELING SERIES

Both silt loam and loam types were mapped but because of small acreage and lack of significant differences to use and management in this survey area were combined. The silt loam types were all considered to be marginal to loams in this soil survey area.

10. ZANESVILLE SERIES

The proper classification of Zanesville series is under some discussion. It seems to be on both sides of the line between FragiudalFs and Fragiudults but at present time is classified as a Fragiudalf although the data available to this office indicate a Fragiudult might be just as appropriate a classification. Soils in this county are believed to be FragiudalFs marginal to Fragiudults. There is some evidence to indicate that whether these soils are FragiudalFs or Fragiudults by definitions in Soil Taxonomy depends on the nature of the beds below the soil. In this county, the underlying beds at depths are not extremely acid materials and may lend to the soils being marginal FragiudalFs. A lab study is being proposed to clarify the classification of these kinds of series.

Classification of the Soils of  
Vanderburgh County, Indiana

<u>Soil Series</u>	<u>Classification</u>
Alford	Typic HapludalFs, fine-silty, mixed, mesic
Bartle	Aeric FragiaqualFs, fine-silty, mixed, mesic (Typic)
Birds	Typic Fluvaquents, fine-silty, mixed, nonacid, mesic
Bonnie	Typic Fluvaquents, fine-silty, mixed, acid, mesic
Borrow pits	Udorthents, loamy, mixed, mesic
Evansville	Typic Haplaquepts, fine-silty, mixed, nonacid, mesic
Ginat	Typic FragiaqualFs, fine-silty, mixed, mesic
Gullied land	Typic HapludalFs, fine-silty, mixed, mesic
Henshaw	Aquic HapludalFs, fine-silty, mixed, mesic
Hosmer	Typic FragiudalFs, fine-silty, mixed, mesic
Huntington	Fluventic Hapludolls, fine-silty, mixed, mesic
Huntington, sandy variant	Fluventic Hapludolls, coarse-loamy, mixed, mesic
Iona	Typic HapludalFs, fine-silty, mixed, mesic
Iva	Aeric OchraqualFs, fine-silty, mixed, mesic (Typic)
Lindside	Fluvaquentic Eutrochrepts, fine-silty, mixed, mesic
Markland	Typic HapludalFs, fine, mixed, mesic
McGary	Aeric OchraqualFs, fine, mixed, mesic
Muren	Aquic HapludalFs, fine-silty, mixed, mesic
Newark	Aeric Fluvaquents, fine-silty, mixed, nonacid, mesic
Patton	Typic Haplaquolls, fine-silty, mixed, mesic
Princeton	Typic HapludalFs, fine-loamy, mixed, mesic
Ragsdale	Typic Argiaquolls, fine-silty, mixed, mesic

<u>Soil Series</u>	<u>Classification</u>
Rahm	Aeric Fluvaquents, fine-silty, mixed, nonacid, mesic
Reesville	Aeric Ochraqualfs, fine-silty, mixed, mesic
Sciotoville	Aquic Fragiudalfs, fine-loamy, mixed, mesic (Aqueptic)
Stendal	Aeric Fluvaquents, fine-silty, mixed, acid, mesic (fine-loamy)
Uniontown	Typic Hapludalfs, fine-silty, mixed, mesic
Wakeland	Aeric Fluvaquents, coarse-silty, mixed, nonacid, mesic
Weinbach	Aeric Fragiaqualfs, fine-silty, mixed, mesic (Typic)
Wellston	Ultic Hapludalfs, fine-silty, mixed, mesic
Wheeling	Ultic Hapludalfs, fine-loamy, mixed, mesic
Wilbur	Aquic Udifluvents, coarse-silty, mixed, nonacid, mesic
Woodmere	Dystric Fluventic Eutrochrepts, fine, mixed, mesic
Zanesville	Typic Fragiudalfs, fine-silty, mixed, mesic
Zipp	Typic Haplaquepts, fine, mixed, nonacid, mesic (montmorillonitic) (Fluventic)