

File

CLASSIFICATION AND CORRELATION

OF

THE SOILS OF

**NOBLE COUNTY
INDIANA**

JUNE 1974



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

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

Classification and Correlation
of the Soils of
Noble County, Indiana

The classification and correlation of the soils of Noble County, Indiana was completed in a conference held in Lincoln, Nebraska during the week of March 25-29, 1974. Paul McCarter, party leader, and Frank Sanders assisted Richard Guthrie in reviewing the supporting data. Dr. Robert Grossman reviewed the draft manuscript and participated in part of the conference.

Symbol	Field Name	Approved Name	Manuscript* Map Symbol
7140W 30W	Adrian muck Kerston muck	) Adrian muck)	Ad
7140	Adrian muck, drained	Adrian muck, drained	Am
6422-A-1	Aubbeenaubbee fine sandy loam	) Aubbeenaubbee fine sandy) loam	Au
732-A-1	Blount silt loam, 0-2% slopes	) Blount silt loam,) 0 to 2 percent slopes	B1A
802-A-1	Del Rey silt loam)	
732-B-2	Blount silt loam, 2-4% slopes, eroded	) Blount silt loam,) 2 to 4 percent slopes,) eroded	B1B2
81035-B-1	Boyer sandy loam, 2-6% slopes	) Boyer loamy sand,) 2 to 6 percent slopes	BoB
81035-C-1	Boyer sandy loam, 6-12% slopes	) Boyer loamy sand,) 6 to 12 percent slopes	BoC
71035-D-2	Boyer sandy loam, 12-18% slopes, eroded	) Boyer loamy sand,) 12 to 18 percent slopes,	BoD2
8325-D-2	Oshtemo sandy loam, 12-18% slopes, eroded	) eroded)	

*The first capital letter is the initial one of the soil name. A second capital letter A, B, C, D, or E shows the slope. Most symbols without a slope letter are those for nearly level soils, but some are for miscellaneous land types. A final number 2 or 3 in the symbol shows that the soil is eroded or severely eroded.

Symbol	Field Name	Approved Name	Manuscript Map Symbol
8322-A-1	Brady sandy loam, 0-2% slopes	) Brady sandy loam)	Br
5322-A-1	Brady loam, 0-2% slopes))	
8323-A-1	Bronson sandy loam, 0-2% slopes))	
5148	Brookston silt loam	Brookston silt loam	Bx
81065-C-3	Casco clay loam, 6-12% slopes, severely eroded	) Casco sandy clay loam,) 8 to 15 percent slopes,) severely eroded	CcC3
8335-C-3	Fox gravelly clay loam, 6-12% slopes, severely eroded)))	
8335-D-3	Fox gravelly clay loam, 12-18% slopes, severely eroded)))	
81065-D-3	Casco clay loam, 12-18% slopes, severely eroded)))	
81065-C-2	Casco sandy loam, 6-12% slopes, eroded))	
0425-B-1	Chelsea fine sand, 2-6% slopes	) Chelsea fine sand,) 2 to 6 percent slopes	ChB
0425-A-1	Chelsea fine sand, 0-2% slopes))	
0305-B-1	Plainfield fine sand, 2-6% slopes))	
7303	Brems loamy fine sand)	
0425-C-1	Chelsea fine sand, 6-12% slopes	) Chelsea fine sand,) 6 to 12 percent slopes	ChC
0425-D-1	Chelsea fine sand, 12-18% slopes))	
0305-C-1	Plainfield fine sand, 6-12% slopes))	
5142-A-1	Crosier loam, 0-2% slopes	) Crosier loam,) 0 to 2 percent slopes	CrA
8142-A-1	Crosier sandy loam, 0-2% slopes))	
5142-B-1	Crosier loam, 2-4% slopes))	

Symbol	Field Name	Approved Name	Manuscript Map Symbol
340W	Edwards muck	Edwards muck	Ed
340	Edwards muck, drained	Edwards muck, drained	Em
8335-A-1	Fox sandy loam, 0-2% slopes	) Fox sandy loam,) 0 to 2 percent slopes	FoA
5333-A-1	Ionia sandy loam, 0-2% slopes)	
8915-A-1	Kalamazoo sandy loam, 0-2% slopes)	
8335-B-1	Fox sandy loam, 2-6% slopes	) Fox sandy loam,) 2 to 6 percent slopes	FoB
81065-B-2	Casco sandy loam, 2-6% slopes, eroded)	
8335-C-2	Fox sandy loam, 6-12% slopes, eroded	) Fox sandy loam,) 6 to 12 percent slopes,) eroded	FoC2
8335-D-2	Fox sandy loam, 12-18% slopes, eroded	) Fox-Casco sandy loams,) 12 to 18 percent slopes,) eroded	FsD2
81065-D-2	Casco sandy loam, 12-18% slopes, eroded)	
8335-E-2	Fox sandy loam, 18-25% slopes, eroded	) Fox-Casco sandy loams,) 18 to 25 percent slopes,) eroded	FsE2
232-A-1	Fulton silt loam, 0-2% slopes	) Fulton silt loam	Fu
6232-A-1	Fulton fine sandy loam, 0-2% slopes)	
3232-A-1	Fulton silty clay loam, 0-2% slopes)	
5328	Gilford sandy loam	) Gilford sandy loam	Gf
7289	Maumee loamy fine sand)	
6128	Wauseon fine sandy loam)	
GP	Gravel Pit	Use conventional symbol	
5902-A-1	Haskins loam, 0-2% slopes	) Haskins loam,) 0 to 2 percent slopes	HaA
6122	Rimer fine sandy loam)	
5902-B-1	Haskins loam, 2-4% slopes)	
8902-A-1	Haskins sandy loam, 0-2% slopes)	
8902-B-1	Haskins sandy loam, 2-4% slopes)	

Symbol	Field Name	Approved Name	Manuscript Map Symbol
5332-A-1	Homer loam, 0-2% slopes	) Homer loam)	Hh
8332-A-1	Homer sandy loam, 0-2% slopes))	
71032-A-1	Wasepi loamy sand, 0-2% slopes))	
140W 5140W	Houghton muck Palms muck	) Houghton muck)	Hm
140	Houghton muck, drained	Houghton muck, drained	Ho
AL BS	Alluvial land, wet Beach sand	) Lake borders)	La
5340	Marl beds	Marl beds	Ma
6	Intermittent lakes	Marsh	Mb
6484-B-1	Martinsville fine sandy loam, 2-6% slopes	) Martinsville fine sandy) loam, 2 to 6 percent slopes	MdB
6484-A-1	Martinsville fine sandy loam, 0-2% slopes))	
7424-B-1	Metea loamy fine sand, 2-6% slopes	) Metea loamy fine sand,) 2 to 6 percent slopes	MeB
7424-A-1	Metea loamy fine sand, 0-2% slopes))	
7424-C-1	Metea loamy fine sand, 6-12% slopes))	
7424-D-1	Metea loamy fine sand, 12-18% slopes))	
5144-B-2	Miami loam, 2-6% slopes, eroded	) Miami loam,) 2 to 6 percent slopes, eroded	MfB2
5144-C-2	Miami loam, 6-12% slopes, eroded	) Miami loam,) 6 to 12 percent slopes, eroded	MfC2
5194-C-2	Miami loam, 6-12% slopes, eroded, gravelly substratum)))	
5144-D-2	Miami loam, 12-18% slopes, eroded	) Miami loam,) 12 to 18 percent slopes, eroded	MfD2

Symbol	Field Name	Approved Name	Manuscript Map Symbol
5144-E-2	Miami loam, 18-25% slopes, eroded	) Miami loam,) 18 to 25 percent slopes,	MfE2
5144-F-2	Miami loam, 25-35% slopes, eroded	) eroded)	
5144-C-3	Miami clay loam, 6-12% slopes, severely eroded	) Miami clay loam,) 6 to 12 percent slopes,) severely eroded	MgC3
5934-C-3	Riddles loam, 6-12% slopes, severely eroded)))	
5144-D-3	Miami clay loam, 12-18% slopes, severely eroded	) Miami clay loam,) 12 to 18 percent slopes,) severely eroded	MgD3
5934-D-3	Riddles loam, 12-18% slopes, severely eroded)))	
5194-A-1	Miami loam, gravelly substratum, 0-2% slopes	) Miami loam,) gravelly substratum, 0 to 2 percent slopes	MhA
5194-B-2	Miami loam, 2-6% slopes, eroded gravelly substratum	) Miami loam,) gravelly substratum,) 2 to 6 percent slopes, eroded	MhB2
3808 808	Milford silty clay loam Milford silt loam	) Milford silty clay loam)	Mn
734-B-2	Morley silt loam, 2-6% slopes, eroded	) Morley silt loam,) 2 to 6 percent slopes,) eroded	MrB2
734-C-2	Morley silt loam, 6-12% slopes, eroded	) Morley silt loam,) 6 to 12 percent slopes,	MrC2
5904-C-2	Rawson loam, 6-12% slopes, eroded	) eroded)	
734-D-2	Morley silt loam, 12-18% slopes, eroded	) Morley silt loam,) 12 to 18 percent slopes, eroded	MrD2
734-C-3	Morley silty clay loam, 6-12% slopes, severely eroded	) Morley silty clay loam,) 6 to 12 percent slopes,) severely eroded	Msc3

Symbol	Field Name	Approved Name	Manuscript Map Symbol
734-D-3	Morley silty clay loam, 12-18% slopes, severely eroded	) Morley silty clay loam,) 12 to 18 percent slopes,) severely eroded	MsD3
734-E-2	Morley silt loam, 18-25% slopes, eroded	) Morley soils,) 18 to 25 percent slopes	MtE
734-E-3	Morley silt loam, 18-25% slopes, severely eroded)))	
5734-C-2	Morley-Miami-Rawson loams, 6-12% slopes, eroded	) Morley, Miami, and Rawson) loams, 6 to 12 percent slopes, eroded	MuC2
8325-B-1	Oshtemo sandy loam, 2-6% slopes	) Oshtemo loamy sand,) 2 to 6 percent slopes	OsB
8325-C-1	Oshtemo sandy loam, 6-12% slopes	) Oshtemo loamy sand,) 6 to 12 percent slopes	OsC
8325-A-1	Oshtemo sandy loam, 0-2% slopes	) Oshtemo sandy loam,) 0 to 2 percent slopes	OtA
81035-A-1	Boyer sandy loam, 0-2% slopes))	
5140	Palms muck, drained	Palms muck, drained	Pb
5204-A-1	Parr loam, 0-2% slopes, gravelly substratum	) Parr loam,) 0 to 2 percent slopes)	PdA
3738	Pewamo silty clay loam	Pewamo silty clay loam	Pe
8904-B-1	Rawson sandy loam, 2-6% slopes	) Rawson sandy loam,) 2 to 6 percent slopes	RaB
8904-C-2	Rawson sandy loam, 6-12% slopes, eroded	) Rawson sandy loam,) 6 to 12 percent slopes,) eroded	RaC2
5904-A-1	Rawson loam, 0-2% slopes	) Rawson loam,) 0 to 2 percent slopes	RbA
8904-A-1	Rawson sandy loam, 0-2% slopes))	
6123-A-1	Seward fine sandy loam, 0-2% slopes))	

Symbol	Field Name	Approved Name	Manuscript Map Symbol
5904-B-1	Rawson loam, 2-6% slopes	) Rawson loam,) 2 to 6 percent slopes	RbB
5734-B-2	Morley-Miami-Rawson loams, 2-6% slopes, eroded	) Rawson, Morley, and Miami) loams, 2 to 6 percent slopes,) eroded	RdB2
5488 6488	Rensselaer loam Rensselaer fine sandy loam	) Rensselaer loam)	Re
8934-A-1 5934-A-1	Riddles sandy loam, 0-2% slopes Riddles loam, 0-2% slopes	) Riddles sandy loam,) 0 to 2 percent slopes))	RsA
8934-B-2 5934-B-2 8144-B-2	Riddles sandy loam, 2-6% slopes, eroded Riddles loam, 2-6% slopes, eroded Miami sandy loam, 2-6% slopes, eroded	) Riddles sandy loam,) 2 to 6 percent slopes))))	RsB
8934-C-2 5934-C-2 8144-C-2	Riddles sandy loam, 6-12% slopes, eroded Riddles loam, 6-12% slopes, eroded Miami sandy loam, 6-12% slopes, eroded	) Riddles sandy loam,) 6 to 12 percent slopes,) eroded)))	RsC2
8934-D-2 5934-D-2	Riddles sandy loam, 12-18% slopes, eroded Riddles loam, 12-18% slopes, eroded	) Riddles sandy loam,) 12 to 18 percent slopes,) eroded)	RSD2
5338 8338 5338-M	Sebewa loam Sebewa sandy loam Sebewa mucky loam	) Sebewa loam))	Se
12 6013 18	Shoals silt loam Eel loam Sloan silt loam	) Shoals silt loam))	Sh
3238 6238 238 5238-M	Toledo silty clay loam Toledo fine sandy loam Toledo silt loam Toledo mucky loam	) Toledo silty clay loam)))	To

Symbol	Field Name	Approved Name	Manuscript Map Symbol
100	Wallkill silt loam	Wallkill silt loam	Wa
5345-A-1	Warsaw loam, 0-2% slopes	) Warsaw loam,) 0 to 2 percent slopes	WrA
5345-B-1	Warsaw loam, 2-6% slopes))	
108	Washtenaw silt loam	Washtenaw silt loam	Ws
5482-A-1	Whitaker loam, 0-2% slopes	) Whitaker loam)	Wt
6482-A-1	Whitaker fine sandy loam, 0-2% slopes))	

Series Established by this Correlation:

None

Series Dropped or Made Inactive by this Correlation:

None

Noble County joins Elkhart and Allen Counties, which have completed soil surveys. The soil survey field sheets and general soil map for Noble County are joined with those of Allen and Elkhart Counties except in a few instances which are explained in an attachment to the final field review report.

SCS-Soils-5 forms have been completed for all series correlated in the survey area. Interpretations were reviewed in conjunction with soil descriptions and coordination was achieved.

The soil survey field sheets were submitted to the Cartographic Unit prior to the conference. All the requirements of Soils Memorandum-8 were satisfied.

Conventional and ad hoc symbols to be retained and those to be deleted from maps are noted. Appropriate symbols are to be assigned from the Guide for Soil Map Compilation on Photobase Map Sheets.

LEGEND OF CONVENTIONAL SYMBOLS

<u>Description</u>	<u>Symbol</u>	<u>Recommended Disposition</u>
Highways and Roads (good motor)		Hold
Railroads		
Single track		Hold
Double track		Hold
Abandoned		Hold
Overpass, Underpass		Hold
Bridges		Delete
Farmstead, house		Hold
Large building (factory)		Hold
Church		Hold
School house		Hold
Cemetery		Hold
Gravel pit		Hold
Borrow area		Use symbol for Borrow Pit
Made land		Hold
Pipeline		Delete
Park, golf course, airport		Hold
Powerlines		Delete
Escarpments		Hold
Stones		Hold
Gravel spot		Hold
Areas with highly organic surface layers		Hold
Sandspot, area		Hold

Description	Symbol	Recommended Disposition
Severely eroded spot	≡ or // or ≡	Hold
Small depression, crossable	◇	Hold
Areas of iron accumulation	Fe	Hold, use ⊙
Dam, small; stock or farm pond	DAM ■	Hold
Calcareous soil	+	Hold, use ⊕
Streams		
Perennial	~~~~~ or ~~~~~	Hold
Intermittent, not crossable	~~~~~ . . . ~~~~~	Hold
crossable	~~~~~ . . . ~~~~~ ↓	Hold
Drainage end	~~~~~ . . . →	Hold
Intermittent Lake	|||||	Hold - use symbol for marsh
Wet spot	⊕ or ⊙	Hold
Lake	⊙ or ⊙ or NAME or WATER	Hold
Gullies	~~~~~→	Hold
County boundaries	NAME OF OTHER COUNTY	Hold
Work boundary	_____	Delete

Approved: June 24, 1974

Maurice Stout, Jr.
 Maurice Stout, Jr.
 Principal Soil Correlator
 Midwest TSC

CONVERSION LEGEND RELATING FIELD MAP SYMBOLS
TO PUBLICATION SYMBOLS

Field Symbol	Publication Symbol	Field Symbol	Publication Symbol
AL	La	5144-F-2	MfE2
BS	La	5148	Bx
6	Mb	5194-A-1	MhA
12	Sh	5194-B-2	MhB2
18	Sh	5194-C-2	MfC2
30W	Ad	5204-A-1	PdA
100	Wa	5238-M	To
108	Ws	5322-A-1	Br
140	Ho	5328	Gf
140W	Hm	5332-A-1	Hh
232-A-1	Fu	5333-A-1	FoA
238	To	5338	Se
0305-B-1	ChB	5338-M	Se
0305-C-1	ChC	5340	Ma
340	Em	5345-A-1	WrA
340W	Ed	5345-B-1	WrA
0425-A-1	ChB	5482-A-1	Wt
0425-B-1	ChB	5488	Re
0425-C-1	ChC	5734-B-2	RdB2
0425-D-1	ChC	5734-C-2	MuC2
732-A-1	B1A	5902-A-1	HaA
732-B-2	B1B2	5902-B-1	HaA
734-B-2	MrB2	5904-A-1	RbA
734-C-2	MrC2	5904-B-1	RbB
734-C-3	MsC3	5904-C-2	MrC2
734-D-2	MrD2	5934-A-1	RsA
734-D-3	MsD3	5934-B-2	RsB
734-E-2	MtE	5934-C-2	RsC2
734-E-3	MtE	5934-C-3	MgC3
802-A-1	B1A	5934-D-2	RsD2
808	Mn	5934-D-3	MgD3
3232-A-1	Fu	6013	Sh
3238	To	6122	HaA
3738	Pe	6123-A-1	RbA
3808	Mn	6128	Gf
5140	Pb	6232-A-1	Fu
5140W	Hm	6238	To
5142-A-1	CrA	6422-A-1	Au
5142-B-1	CrA	6482-A-1	Wt
5144-B-2	MfB2	6484-A-1	MdB
5144-C-2	MfC2	6484-B-1	MdB
5144-C-3	MgC3	6488	Re
5144-D-2	MfD2	7289	Gf
5144-D-3	MgD3	7140	Am
5144-E-2	MfE2	7140W	Ad

Field Symbol	Publication Symbol	Field Symbol	Publication Symbol
7303	ChB	8902-A-1	HaA
7424-A-1	MeB	8902-B-1	HaA
7424-B-1	MeB	8904-A-1	RbA
7424-C-1	MeB	8904-B-1	RaB
7424-D-1	MeB	8904-C-2	RaC2
8142-A-1	CrA	8915-A-1	FoA
8144-B-2	RsB	8934-A-1	RsA
8144-C-2	RsC2	8934-B-2	RsB
8322-A-1	Br	8934-C-2	RsC2
8323-A-1	Br	8934-D-2	RsD2
8325-A-1	OtA	71032-A-1	Hh
8325-B-1	OsB	71035-D-2	BoD2
8325-C-1	OsC	81035-A-1	OtA
8325-D-2	BoD2	81035-B-1	BoB
8332-A-1	Hh	81035-C-1	BoC
8335-A-1	FoA	81065-B-2	FoB
8335-B-1	FoB	81065-C-2	CcC3
8335-C-2	FoC2	81065-C-3	CcC3
8335-C-3	CcC3	81065-D-2	FsD2
8335-D-2	FsD2	81065-D-3	CcC3
8335-D-3	CcC3		
8335-E-2	FsE2		
8338	Se		

CLASSIFICATION OF PEDONS SAMPLED
FOR LABORATORY ANALYSIS

Purdue University Soils Laboratory

Sampled As:	Laboratory No.:	Approved Name:
Brady	71-(200-207)	Brady
Casco	70-(46-49)	Casco
Crosier	72-(154-158)	Crosier
Fox	70-(40-45)	Fox
Homer	71-(157-193)	Homer
Milford	70-(50-57)	Milford

Purdue Univ. - Indiana Highway Dept.

Crosier	Lab. No. not assigned	Data not yet reported
Fox	" " "	
Milford	" " "	
Riddles	" " "	

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

by
Richard L. Guthrie

BLOUNT SERIES

The mapping units of the Del Rey series were combined with appropriate units of the Blount series. Only 234 acres of Del Rey soils were mapped. Morphology and interpretations for the two series are very similar.

CASCO SERIES

The sandy loam phase was combined with the sandy clay loam unit because of small acreage and similarity in morphology and management.

FOX SERIES

These soils typically contain about 25 percent coarse fragments in the solum. Wisconsin has agreed to expand the range of the Fox series to include this amount.

FULTON SERIES

The acreage of these soils is small in Noble County, but they are on a unique landscape and have special management problems.

GILFORD SERIES

The range of colors in the B horizon is expanded to include 5Y hues. These soils have colors in the lower B horizons that are browner than typical for the Gilford series.

HOMER SERIES

The official type location for the Homer series has been moved to Noble County.

HOUGHTON SERIES

The undrained mapping units of Palms muck were combined with similar mapping units of Houghton muck. The Palms mapping units are of small extent and most Houghton mapping units contain inclusions of Palms soils.

METEA SERIES

These soils are taxadjuncts to the Metea series because the upper part of the argillic horizon consists of lamellae.

MIAMI SERIES

Gravelly substratum phases of Miami have severe limitations for trench-type sanitary landfills and for sewage lagoons whereas the other phases have slight or moderate limitations on equivalent slopes.

MILFORD SERIES

The mollic epipedon is one inch thinner than the minimum range for the series, but this appears to be within the error of observation. Colors of the mollic epipedon are lighter than typical for the series.

MORLEY SERIES

The 734-E-2 and 734-E-3 units were combined and renamed Morley soils, 18 to 25 percent slopes because the E2 units are in woods and the E3 units have been cultivated. The mapping unit is an undifferentiated unit of Morley silt loam and Morley silty clay loam. These differences are apparent from land use and are not significant to use and management on these slopes.

OSHTMO SERIES

These soils have thinner argillic horizons and contain more sand than is typical for the series.

RAWSON SERIES

These soils are well drained in Noble County. Ohio has agreed to add well drained to the range of the Rawson series.

CLASSIFICATION OF SOILS

<u>Soil Series</u>	<u>Classification</u>
Adrian	Terric Medisaprists, sandy or sandy-skeletal, mixed, euic, mesic
Aubbeenaubbee	Aeric Ochraqualfs, fine-loamy, mixed, mesic
Blount	Aeric Ochraqualfs, fine, illitic, mesic
Boyer	Typic Hapludalfs, coarse-loamy, mixed, mesic
Brady	Aquollic Hapludalfs, coarse-loamy, mixed, mesic
Brookston	Typic Argiaquolls, fine-loamy, mixed, mesic
Casco	Typic Hapludalfs, fine-loamy over sandy or sandy-skeletal, mixed, mesic
Chelsea	Alfic Udipsamments, mixed, mesic
Crosier	Aeric Ochraqualfs, fine-loamy, mixed, mesic
Edwards	Limnic Medisaprists, marly, euic, mesic
Fox	Typic Hapludalfs, fine-loamy over sandy or sandy-skeletal, mixed, mesic
Fulton	Aeric Ochraqualfs, fine, illitic, mesic
Gilford	Typic Haplaquolls, coarse-loamy, mixed, mesic
Haskins	Aeric Ochraqualfs, fine-loamy, mixed, mesic
Homer	Aeric Ochraqualfs, fine-loamy over sandy or sandy-skeletal, mixed, mesic
Houghton	Typic Medisaprists, euic, mesic
Lake borders	Aquents
Marl beds	Aquents
Marsh	Aquents, Saprists, and Aquolls
Martinsville	Typic Hapludalfs, fine-loamy, mixed, mesic
Metea <u>1/</u>	Arenic Hapludalfs, loamy, mixed, mesic
Miami	Typic Hapludalfs, fine-loamy, mixed, mesic

<u>Soil Series</u>	<u>Classification</u>
Milford	Typic Haplaquolls, fine, mixed, mesic
Morley	Typic Hapludalfs, fine, illitic, mesic
Oshtemo	Typic Hapludalfs, coarse-loamy, mixed, mesic
Palms	Terric Medisaprists, loamy, mixed, euic, mesic
Parr	Typic Argiudolls, fine-loamy, mixed, mesic
Pewamo	Typic Argiaquolls, fine, mixed, mesic
Rawson	Typic Hapludalfs, fine-loamy, mixed, mesic
Rensselaer	Typic Argiaquolls, fine-loamy, mixed, mesic
Riddles	Typic Hapludalfs, fine-loamy, mixed, mesic
Sebewa	Typic Argiaquolls, fine-loamy over sandy or sandy-skeletal, mixed, mesic
Shoals	Aeric Fluvaquents, fine-loamy, mixed, nonacid, mesic
Toledo	Mollic Haplaquepts, fine, illitic, nonacid, mesic
Wallkill	Thapto-Histic Fluvaquents, fine-loamy, mixed, nonacid, mesic
Warsaw	Typic Argiudolls, fine-loamy over sandy or sandy-skeletal, mixed, mesic
Washtenaw	Typic Haplaquents, fine-loamy, mixed, nonacid, mesic
Whitaker	Aeric Ochraqualfs, fine-loamy, mixed, mesic

1/ Taxadjunct - See Notes to Accompany the Classification and Correlation of the Soils of Noble County, Indiana.