

CLASSIFICATION AND CORRELATION
OF
THE SOILS OF
*RIPLEY COUNTY AND
PART OF JENNINGS COUNTY
INDIANA*

OCTOBER 1982



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

Amend 1 10/13/82

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
Midwest National Technical Center
Lincoln, Nebraska 68501

Classification and Correlation
of the Soils of
Ripley County and Part of Jennings County, Indiana

A correlation conference was held at the MNTC in Lincoln, Nebraska, the week of September 21, 1981. Participants in the conference were Kendall M. McWilliams, soil survey party leader; Jerry D. Larson, soil specialist, Indiana State Office; and G. J. Post, soil correlator, MNTC. The draft copy of the manuscript, field sheets, correlation samples, laboratory data, and field notes were available and used to prepare this correlation.

Headnote for Detailed Soil Survey Legend:

Map symbols consist of a combination of letters or of letters and a number. The first capital letter is the initial one of the map unit name. The lowercase letter that follows separates map 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 for nearly level soils or miscellaneous areas. A final number of 2 indicates that the soil is eroded and 3 that it is severely eroded.

<u>Field Symbol</u>	<u>Field Mapping Unit Name</u>	<u>Publ. Symbol</u>	<u>Approved Mapping Unit Name</u>
Ag	Algiers silt loam	Ag	Algiers silt loam, frequently flooded
AvA	Avonburg silt loam, 0 to 2 percent slopes	AvA	Avonburg silt loam, 0 to 2 percent slopes
AvB2	Avonburg silt loam, 2 to 6 percent slopes, eroded	AvB2	Avonburg silt loam, 2 to 6 percent slopes, eroded
AvB3)))
AvB)))
BaA	Bartle silt loam, 0 to 2 percent slopes	BaA	Bartle silt loam, 0 to 2 percent slopes
BaB)))
BeC2	Bonnell silt loam, 6 to 12 percent slopes, eroded	BeC2	Bonnell silt loam, 6 to 12 percent slopes, eroded
BeC3)))
BeD3	Bonnell silt loam, 12 to 18 percent slopes, severely eroded	BeD3	Bonnell silt loam, 12 to 18 percent slopes, severely eroded
BeD2)))
BeE	Bonnell silt loam, 18 to 35 percent slopes	BeE	Bonnell silt loam, 18 to 35 percent slopes
BeE2)))
BeE3)))
CbD2	Carmel silt loam, 12 to 18 percent slopes, eroded	CbD2	Carmel silt loam, 12 to 18 percent slopes, eroded
CbD3)))
LoD2)))
LoD3)))
CbE	Carmel silt loam, 18 to 35 percent slopes	CbE	Carmel silt loam, 18 to 35 percent slopes
CbE2)))
CbE3)))
LoE2)))
LoE3)))
CcB2	Cincinnati silt loam, 2 to 6 percent slopes, eroded	CcB2	Cincinnati silt loam, 2 to 6 percent slopes, eroded
CcB3)))
CcB)))
NhB2)))
WgB2)))
SwB2)))
CcC2	Cincinnati silt loam, 6 to 12 percent slopes, eroded	CcC2	Cincinnati silt loam, 6 to 12 percent slopes, eroded
CnC2)))
CcC)))
HkC2)))
BaC2)))
NhC2)))
WgC2)))
RoC2)))

<u>Field Symbol</u>	<u>Field Mapping Unit Name</u>	<u>Publ. Symbol</u>	<u>Approved Mapping Unit Name</u>
CcC3 CnC3 RoC3 HkC3 BnC3 WhC3 WgC3	Cincinnati silt loam, 6 to 12 percent slopes, severely eroded	CcC3	Cincinnati silt loam, 6 to 12 percent slopes, severely eroded
CcD2 CcD3 CcD WgD2 WgD3	Cincinnati silt loam, 12 to 18 percent slopes, eroded	CcD2	Cincinnati silt loam, 12 to 18 percent slopes, eroded
Cm	Clermont silt loam	Cm	Cobbsfork silt loam
Br Bs	Dearborn silt loam	Dr	Dearborn fine sandy loam, frequently flooded
EdE EdE2 EdE3 EcE EcE2	Eden flaggy silty clay loam, 18 to 25 percent slopes	EdE	Eden flaggy silty clay loam, 18 to 25 percent slopes
EdF EcF	Eden flaggy silty clay loam, 25 to 50 percent slopes	EdF	Eden flaggy silty clay loam, 25 to 50 percent slopes
ErF FmF GcF	Eden-Rock outcrop complex, 25 to 50 percent slopes	ErF	Eden silty clay loam -Rock outcrop complex, 25 to 50 percent slopes
EkB EkB2 WhB WhB2 EkA PdB	Elkinsville silt loam, 2 to 6 percent slopes	EkB	Elkinsville silt loam, 2 to 6 percent slopes
EkC2 EkC3 WhC2 WhD2 PaC PaC2 PdC EkD2 EkD3	Elkinsville silt loam, 6 to 12 percent slopes, eroded	EkC2	Elkinsville silt loam, 6 to 12 percent slopes, eroded

Thus ErF will be after EkC2

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The tables are ordered in this sequence but I have suggested that the Detailed Soils Legend be in alpha sequence by symbols.

<u>Field Symbol</u>	<u>Field Mapping Unit Name</u>	<u>Publ. Symbol</u>	<u>Approved Mapping Unit Name</u>
GrD2 GrD3 RyD2 RyD3 GrD	Grayford silty clay loam, 12 to 18 percent slopes, eroded	) GrD2))))	Grayford silty clay loam, 12 to 18 percent slopes, eroded
GrE GrE2 GrE3	Grayford silt loam, 18 to 35 percent slopes	) GrE))	Grayford silt loam, 18 to 35 percent slopes
Hd	Haymond silt loam	Hd	Haymond silt loam, frequently flooded
HkD2 BnD2 HkD	Hickory silt loam, 10 to 15 percent slopes, eroded	) HkD2))	Hickory silt loam, 12 to 18 percent slopes, eroded
HkD3 BnD3	Hickory silt loam, 10 to 15 percent slopes, severely eroded	) HkD3))	Hickory silt loam, 12 to 18 percent slopes, severely eroded
HkE HkE2 HkE3 BnE BnE2	Hickory loam, 18 to 35 percent slopes	) HkE))))	Hickory loam, 18 to 35 percent slopes
Hn Sh We	Holton silt loam	) Hn))	Holton silt loam, frequently flooded
Wk Wi	Wilbur silt loam	) Lb)	Lobdell silt loam, frequently flooded
No Ln	Nolin silt loam	) No)	Nolin silt loam, frequently flooded
PeB2 PeB PeC2 PeA	Pekin silt loam, 2 to 6 percent slopes, eroded	) PeB2)))	Pekin silt loam, 2 to 6 percent slopes eroded
Pt	Pits, Quarry	Pt	Pits, Quarry
RoA	Rossmoyne silt loam, 0 to 2 percent slopes	RoA	Rossmoyne silt loam, 0 to 2 percent slopes
RoB2 RoB3	Rossmoyne silt loam, 2 to 6 percent slopes, eroded	) RoB2)	Rossmoyne silt loam, 2 to 6 percent slopes, eroded

<u>Field Symbol</u>	<u>Field Mapping Unit Name</u>		<u>Publ. Symbol</u>	<u>Approved Mapping Unit Name</u>
RyC2	Ryker silt loam, 6 to 12	)	RyC2	Ryker silt loam, 6 to 12 percent slopes
GrB2	percent slopes, eroded	)		eroded
GrC2)		
GrC3)		
RyB2)		
RyC3)		
Je	Stonelick loam		St	Stonelick loam, frequently flooded
SwC2	Switzerland silt loam, 6 to	)	SwC2	Switzerland silt loam, 6 to 12 percent
SwC	12 percent slopes, eroded	)		slopes, eroded
SwC3)		
GkC2)		
CbC3)		
CbC2)		
SwD2	Switzerland silt loam, 12	)	SwD2	Switzerland silt loam, 12 to 18 percent
GkD2	to 18 percent slopes,	)		slopes, eroded
GkD3	eroded)		
Wa	Wakeland silt loam		Wa	Wakeland silt loam, frequently flooded
Gf	Wirt loam, flaggy clay		Wr	Wirt loam, flaggy clay substratum,
	substratum			frequently flooded
Gh	Wirt silt loam	)	Wt	Wirt silt loam, frequently flooded
Ge)		
Ee)		

Series Established by this Correlation: None

Series Dropped or made Inactive: None

Certification Statement:

The state soil scientist certifies that the mapping is complete, and the general soil map of Ripley County has been joined with those of Jennings, Jefferson, Dearborn-Ohio, and Decatur County Soil Surveys, which are the adjoining counties with completed soil survey. All discrepancies have been noted and are on file at the Indiana State Office and in the MTSC. Also, detailed soil maps for Ripley County and part of Jennings County have been joined with these counties and other adjacent counties where there are ongoing soil surveys (Franklin and Switzerland). Exceptions caused by differences in correlation or in composition of units are on file in the Soil Conservation Service State Office in Indiana and in the MTSC. Typical pedons are in mapped areas of the named unit, and the legal descriptions of the typical pedons are correct.

Verification of Exact Cooperator Names:

The cooperators block on the front cover will read:

United States Department of Agriculture, Soil Conservation Service
in cooperation with Purdue University Agricultural Experiment Station
and Indiana Department of Natural Resources, Soil and Water Conservation
Committee.

The citation in the box on the inside of the front cover will read:

This survey was made cooperatively by the Soil Conservation Service,
Purdue University Agricultural Experiment Station, and the Indiana
Department of Natural Resources, Soil and Water Conservation Committee.
It is part of the technical assistance furnished to the Ripley County
Soil and Water Conservation District and the area Planning Commission.
Financial assistance was made available by the Ripley County Commissioners
and approved by the County Council.

Disposition of Field Sheets:

The original field sheets for Ripley County and part of Jennings County are retained by the state and will be used in the map compilation and finishing procedures. Copies have been made for fire protection purposes. The state office at Indianapolis will prepare the atlas sheets for publication by July 1983.

Prior Soil Survey Publications:

None--no soil survey specifically for the county.

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
CULTURAL FEATURES		CULTURAL FEATURES (cont.)		SPECIAL SYMBOLS FOR SOIL SURVEY	
BOUNDARIES		MISCELLANEOUS CULTURAL FEATURES		SOIL DELINEATIONS AND SOIL SYMBOLS	
County or parish		Farmstead, house (omit in urban areas)	•	ESCARPMENTS	
Minor civil division		Church	⋈	Bedrock (points down slope)	.....
Reservation (national forest or park, state forest or park, and large airport)		School	⋈	Other than bedrock (points down slope)	.....
Field sheet matchline & nestline		WATER FEATURES		MISCELLANEOUS	
AD HOC BOUNDARY (label)		DRAINAGE		Gravelly spot	
Small airport, airfield, park, drillfield, cemetery, or flood pool		Perennial, double line		Rock outcrop (includes sandstone and shale)	
STATE COORDINATE TICK 1 890 000 FEET		Perennial, single line		Sandy spot	
LAND DIVISION CORNERS (sections and land grants)		Intermittent		Severely eroded spot	
ROADS		Drainage end		RECOMMENDED AD HOC SOIL SYMBOLS	
Divided (median shown if scale permits)		LAKES, PONDS AND RESERVOIRS		Cut and fill land up to 3 acres in size	
County, farm or ranch		Perennial		⊙	
ROAD EMBLEMS & DESIGNATIONS		MISCELLANEOUS WATER FEATURES			
Interstate		Wet spot	⋈		
Federal					
State					
RAILROAD					
DAMS					
Large (to scale)					
Medium or small					

LIST OF PRIME FARMLAND MAP UNITS

Ag Algiers silt loam, frequently flooded (where drained and floods less than once in two years during the growing season for corn and soybeans)

AvA Avonburg silt loam, 0 to 2 percent slopes (where drained)

AvB2 Avonburg silt loam, 2 to 6 percent slopes, eroded (where drained)

BaA Bartle silt loam, 0 to 2 percent slopes (where drained)

CcB2 Cincinnati silt loam, 2 to 6 percent slopes, eroded

Cm Cobbsfork silt loam (where drained)

EkB Elkinsville silt loam, 2 to 6 percent slopes, eroded

Hd Haymond silt loam, frequently flooded (where floods less than once in two years during the growing season for corn and soybeans)

Hn Holton silt loam, frequently flooded (where drained and floods less than once in two years during the growing season for corn and soybeans)

Lb Lobdell silt loam, frequently flooded (where floods less than once in two years during the growing season for corn and soybeans)

No Nolin silt loam, frequently flooded (where floods less than once in two years during the growing season for corn and soybeans)

PeB2 Pekin silt loam, 2 to 6 percent slopes

RoA Rossmoyne silt loam, 0 to 2 percent slopes

RoB2 Rossmoyne silt loam, 2 to 6 percent slopes, eroded

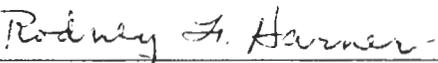
St Stonelick loam, frequently flooded (where floods less than once in two years during the growing season for corn and soybeans)

Wa Wakeland silt loam, frequently flooded (where drained and floods less than once in two years during the growing season for corn and soybeans)

Wr Wirt loam, flaggy clay substratum, frequently flooded (where floods less than once in two years during the growing season for corn and soybeans)

Wt Wirt silt loam, frequently flooded (where floods less than once in two years during the growing season for corn and soybeans)

Approved: October 5, 1982



RODNEY F. HARNER
Head, Soils Staff
Midwest NTC

Ripley County and Part of Jennings County, Indiana

CONVERSION LEGEND
 Ripley County and Part of Jennings County, Indiana
 November 1981

<u>Field Symbol</u>	<u>Publication Symbol</u>	<u>Field Symbol</u>	<u>Publication Symbol</u>	<u>Field Symbol</u>	<u>Publication Symbol</u>
Ag	Ag	CnC3	CcC3	HkE	HkE
AvA	AvA	EcE	EdE	HkE2	HkE
AvB	AvB2	EcE2	EdE	HkE3	HkE
AvB2	AvB2	EcF	EdF	Hn	Hn
AvB3	AvB2	EdE	EdE	Je	St
BaA	BaA	EdE2	EdE	Ln	No
BaB	BaA	EdE3	EdE	LoD2	CbD2
BaC2	CcC2	EdF	EdF	LoD3	CbD2
BeC2	BeC2	Ee	Wt	LoE2	CbE
BeC3	BeC2	EkA	EkB	LoE3	CbE
BeD2	BeD3	EkB	EkB	NhB2	CcB2
BeD3	BeD3	EkB2	EkB	NhC2	CcC2
BeE	BeE	EkC2	EkC2	No	No
BeE2	BeE	EkC3	EkC2	PaC	EkC2
BeE3	BeE	EkD2	EkC2	PaC2	EkC2
BnC3	CcC3	EkD3	EkC2	PdB	EkB
BnD2	HkD2	ErF	ErF	PdC	EkC2
BnD3	HkD3	FmF	ErF	PeA	PeB2
BnE	HkE	GcF	ErF	PeB	PeB2
BnE2	HkE	Ge	Wt	PeB2	PeB2
Br	Dr	Gh	Wt	PeC2	PeB2
Bs	Dr	Gf	Wr	Pt	Pt
CbC2	SwC2	GkC2	SwC2	RoA	RoA
CbC3	SwC2	GkD2	SwD2	RoB2	RoB2
CbD2	CbD2	GkD3	SwD2	RoB3	RoB2
CbD3	CbD2	GrB2	RyC2	RoC2	CcC2
CbE	CbE	GrC2	RyC2	RoC3	CcC3
CbE2	CbE	GrC3	RyC2	RyB2	RyC2
CbE3	CbE	GrD	GrD2	RyC2	RyC2
CcB	CcB2	GrD2	GrD2	RyC3	RyC2
CcB2	CcB2	GrD3	GrD2	RyD2	GrD2
CcB3	CcB2	GrE	GrE	RyD3	GrD2
CcC	CcC2	GrE2	GrE	Sh	Hn
CcC2	CcC2	GrE3	GrE	SwB2	CcB2
CcC3	CcC3	Hd	Hd	SwC	SwC2
CcD	CcD2	HkC2	CcC2	SwC2	SwC2
CcD2	CcD2	HkC3	CcC3	SwC3	SwC2
CcD3	CcD2	HkD	HkD2	SwD2	SwD2
Cm	Cm	HkD2	HkD2	Wa	Wa
CnC2	CcC2	HkD3	HkD3	We	Hn

Ripley County and Part of Jennings County, Indiana

<u>Field Symbol</u>	<u>Publication Symbol</u>
WgB2	CcB2
WgC2	CcC2
WgC3	CcC3
WgD2	CcD2
WgD3	CcD2
WhB	EkB
WhB2	EkB
WhC2	EkC2
WhC3	CcC3
WhD2	EkC2
Wk	Lb
Wi	Lb

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

Pedons Characterized at Purdue Lab

<u>Sampled As</u>	<u>Sample Numbers</u>	<u>Publication Map Symbol</u>	<u>Approved Classification</u>
Algiers	S80IN137-2-(1-7)	Ag	Algiers
Avonburg	S78IN137-1-(1-5)	AvA	Avonburg taxadjunct
Bartle	S79IN137-8-(1-7)	BaA	Bartle taxadjunct
Bonnell	S79IN137-9-(1-7)	BeC2	Bonnell
Cincinnati	S78IN137-3-(1-9)	CcB2	Cincinnati taxadjunct
Clermont	S78IN137-2-(1-6)	Cm	Cobbsfork taxadjunct
Clermont	S79IN137-7-(1-7)	Cm	Cobbsfork taxadjunct
Dearborn	S79IN137-4-(1-6)	Dr	Dearborn taxadjunct
Eden	S78IN137-13-(1-6)	EdF	Eden
Elkinsville	S80IN137-1-(1-8)	EkB	Elkinsville
Ryker	S79IN137-5-(1-7)	GrD2	Grayford taxadjunct
Grayford	S79IN137-3-(1-8)	GrE	Grayford taxadjunct
Haymond	S79IN137-1-(1-5)	Hd	Haymond
Hickory Variant	S78IN137-12-(1-6)	HkD2	Hickory
Orrville	S78IN137-15-(1-6)	Hn	Holton
Wilbur	S80IN137-3-(1-4)	Lb	Lobdell
Nolin	S79IN137-6-(1-4)	No	Nolin
Pekin	S80IN137-4-(1-8)	PeB2	Pekin taxadjunct
Rossmoyne	S78IN137-7-(1-9)	RoB2	Rossmoyne taxadjunct
Ryker	S80IN137-6-(1-6)	RyC2	Ryker
Gessie	S79IN137-2-(1-6)	St	Stonelick
Switzerland	S78IN137-10-(1-8)	SwC2	Switzerland taxadjunct
Wakeland	S80IN137-5-(1-5)	Wa	Wakeland
Chagrin	S78IN137-14-(1-6)	Wr	Wirt

Pedons Sampled for Engineering Test Data

<u>Sampled As</u>	<u>Sample Numbers</u>	<u>Publication Map Symbol</u>	<u>Approved Classification</u>
Clermont	S79IN137-7-(1-7)	Cm	Cobbsfork taxadjunct
Rossmoyne	S78IN137-7-(1-9)	RoB2	Rossmoyne taxadjunct

Notes to Accompany
Classification and Correlation
of the Soils of
Ripley and Part of Jennings County, Indiana

by
Jerry D. Larson and G. J. Post

ALGIERS SERIES

This soil floods frequently in the winter and early spring but very seldom during the cropping season. Therefore, this soil is considered prime farmland even though only a small percentage is farmed at the present time.

AVONBURG SERIES

This soil is a taxadjunct because the base saturation is slightly lower than defined for the series, and it does not have till in the solum. It is developed in loess over silty glacial drift of unknown age.

BARTLE SERIES

This soil is a taxadjunct because the structure of the fragipan is slightly finer than defined for a fragipan, and it is slightly browner in the upper subsoil than defined for the series.

CARMEL SERIES

This soil is a taxadjunct because the clay content is slightly higher in the control section than defined in the range for the series.

CINCINNATI SERIES

This soil is developed in loess over silty glacial till of unknown age. Only the CcB2 map unit is considered a taxadjunct because it does not have till in the upper 40 inches and has slightly less clay in the control section.

COBBSFORK SERIES

This soil was mapped as Clermont throughout the survey. However, it is determined that this soil is much closer to the Cobbsfork series than Clermont. It is a taxadjunct to the Cobbsfork series because it has a slightly lower base saturation than defined for the series. This soil is formed in loess and silty glacial drift of unknown age over Illinoian till.

DEARBORN SERIES

The Dearborn soil in this survey area does not have a dark enough surface layer color to qualify as a Mollisol. It is slightly more sandy in the subsoil and substratum than defined for the series and is, therefore, considered a taxadjunct.

GRAYFORD SERIES

This soil is a taxadjunct because it is deeper than 60 inches to bedrock, has a slightly lower base saturation, and has a slightly higher percent of clay in the lower solum than is defined for the series.

PEKIN SERIES

The Pekin soil in this survey area has a slightly higher clay content in the lower subsoil and in the substratum than is defined for the series and is, therefore, considered to be a taxadjunct to the Pekin series.

ROSSMOYNE SERIES

This soil is a taxadjunct because it has slightly less clay in the argillic horizon than defined for the series and does not have till with a depth of 40 inches. It is developed in loess and silty glacial drift of unknown age over till usually at depths greater than 80 inches.

SWITZERLAND SERIES

This soil is a taxadjunct because it does not quite meet the texture requirement for a strongly contrasting particle-size class between the loess and the residuum horizon.

CLASSIFICATION OF THE SOILS

<u>Soil Name</u>	<u>Family or Higher Taxonomic Class</u>
✓ Algiers	Fine-loamy, mixed, nonacid, mesic Aquic Udifluvents ✓
✓ *Avonburg	Fine-silty, mixed, mesic Aeric Fragiaqualfs ✓
✓ *Bartle	Fine-silty, mixed, mesic Aeric Fragiaqualfs ✓
✓ Bonnell	Fine, mixed, mesic Typic Hapludalfs ✓
✓ *Carmel	Fine, vermiculitic, mesic Typic Hapludalfs ✓
✓ Cincinnati	Fine-silty, mixed, mesic Typic Fragiudalfs ✓
✓ *Cobbsfork	Fine-silty, mixed, mesic Typic Ochraqualfs ✓
✓ *Dearborn	Loamy-skeletal, mixed, mesic Fluventic Hapludolls ✓
✓ Eden	Fine, mixed, mesic Typic Hapludalfs ✓
✓ Elkinsville	Fine-silty, mixed, mesic Ultic Hapludalfs ✓
✓ *Grayford	Fine-loamy, mixed, mesic Ultic Hapludalfs ✓
✓ Haymond	Coarse-silty, mixed, nonacid, mesic Typic Udifluvents ✓
✓ Hickory	Fine-loamy, mixed, mesic Typic Hapludalfs ✓
✓ Holton	Coarse-loamy, mixed, nonacid, mesic Aeric Fluvaquents ✓
✓ Lobdell	Fine-loamy, mixed, mesic Fluvaquentic Eutrochrepts ✓
✓ Nolin	Fine-silty, mixed, mesic Dystric Fluventic Eutrochrepts ✓
✓ *Pekin	Fine-silty, mixed, mesic Aquic Fragiudalfs ✓
✓ *Rossmoyne	Fine-silty, mixed, mesic Aquic Fragiudalfs ✓
✓ Ryker	Fine-silty, mixed, mesic Typic Paleudalfs ✓
✓ Stonelick	Coarse-loamy, mixed (calcareous), mesic Typic Udifluvents ✓
✓ *Switzerland	Fine-silty over clayey, mixed, mesic Typic Hapludalfs ✓
Wakeland	Coarse-silty, mixed, nonacid, mesic Aeric Fluvaquents ✓
Wirt	Coarse-loamy, mixed, nonacid, mesic Typic Udifluvents ✓

*Taxadjunct--See "Notes to Accompany Classification and Correlation of the Soils of Ripley County and part of Jennings County, Indiana" for details.