

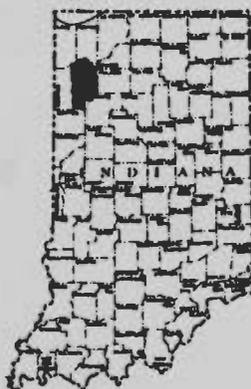
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**CLASSIFICATION AND CORRELATION
OF
THE SOILS OF**

**JASPER COUNTY
INDIANA**

SEPTEMBER 1985

LOCATION



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

*Amend No. 2 2/86
Amend No. 1 11/4/85*

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
Midwest National Technical Center
Lincoln, Nebraska 68508-3866

Classification and Correlation
of the Soils of
Jasper County, Indiana

A correlation conference was held at MNTC in Lincoln, Nebraska, December 13-16, 1982. Participating were Larry C. Osterholz, party member, H. Raymond Sinclair, Jr., state soil scientist, and Robert I. Turner, soil correlator. The material reviewed comprised the first draft of the soil survey manuscript, correlation samples, field sheets, map unit notes, laboratory data, field correlation, and SCS-SOILS-5 forms. Additional information was reviewed and discussed via correspondence from Rodney F. Harner to H. Raymond Sinclair dated December 22, 1982, and replied to on July 5, 1984. Since that time, clarification has been obtained on a number of items by telephone conversation. This draft correlation summarizes this material, too. Robert I. Turner participated in the comprehensive field review on May 24-27, 1982.

Headnote for Detailed Soil Survey Legend:

Map symbols consist of a combination of letters or of letters and numbers. 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 moderately eroded.

SOIL CORRELATION OF
JASPER COUNTY, INDIANA

Field symbols	Field map unit name	Publication symbol	Approved map unit name
Tt, Ac, Ab	Muskego Variant muck, drained	Ab	Ackerman muck, drained
An, Ad, As, Pa	Adrian muck, drained	As	Adrian muck, drained
AtA	Andres Variant loam, 1 to 2 percent slopes	AtA	Andres loam, 0 to 2 percent slopes
AyB, AyA, AyB2, Ja, JaB, JaB2	Ayr loamy sand, 1 to 4 percent slopes	AyB	Ayr loamy fine sand, 1 to 4 percent slopes
BeA, Be, BmA, BoA, BeB	Brems loamy sand, 1 to 3 percent slopes	BeB	Brems loamy sand, 1 to 3 percent slopes
Br, Wd, Wh	Brookston loam	Br	Brookston loam
ChB, ChC	Chelsea sand, 2 to 6 percent slopes	ChB	Chelsea sand, 2 to 6 percent slopes
CoA, Co, Mr, CoB2, MrB, MrA, MrB2, MtA, MtB2, MtB, CoB	Corwin loam, 1 to 3 percent slopes	CoB	Corwin loam, moderately permeable, 1 to 3 percent slopes
Cp, Cm	Craigmile sandy loam, frequently flooded	Cp	Craigmile sandy loam, frequently flooded
Dc, DcA, Fo, FoA, FoB, FoB2, Ky, KyA, KyB	Darroch silt loam	Dc	Darroch loam
Dg, DeA	Darroch fine sandy loam, till substratum	Dg	Darroch, till substratum-Ocell complex
Ed, Mf	Edwards muck, drained	Ed	Edwards muck, drained
Rr, Fa	Pensselaer Variant sandy loam	Fa	Faxon loam

JASPER COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
Gf	Gilford fine sandy loam	Gf	Gilford fine sandy loam
Gz, GzB	Griswold Variant loam, 0 to 3 percent slopes	GzB	Grovecity fine sandy loam, 1 to 3 percent slopes
Ho, Hu, Wa	Houghton muck, drained	Ho	Houghton muck, drained
Hp, Hn	Houghton muck, frequently flooded	Hp	Houghton muck, frequently flooded
Ro, Wf, Ir	Iroquois fine sandy loam	Ir	Iroquois fine sandy loam
SbB2, MsB, MsB2, MtC2, Sb, SbB, LuB2	Saylesville Variant clay loam, 0 to 2 percent slopes, eroded	LuB2	Lucas silty clay loam, 2 to 6 percent slopes, eroded
AuA, Au, AuB, AvA, AvB, Cr, CrA, CrB, HaA, MaA, Sh, ShA, MaB	Aubbeenaubbee loamy fine sand, 1 to 3 percent slopes	MaB	Markton-Aubbeenaubbee complex, 1 to 3 percent slopes
McB, McA, McB2, McC, McC2, McC3, McD2	Martinsville fine sandy loam, 2 to 6 percent slopes	McB	Martinsville fine sandy loam, 2 to 6 percent slopes
AzA, MeA, MbA	Ayr Variant fine sandy loam, 0 to 2 percent slopes	MeA	Metamora fine sandy loam, moderately permeable, 0 to 1 percent <i>slopes</i>
CnA, Cn, MeB	Metamora fine sandy loam, 1 to 3 percent slopes	MeB	Metamora fine sandy loam, moderately permeable, 1 to 4 percent slopes
MkB, Mk, MkA, MkB2, MkC2, OWB	Metea loamy sand, 2 to 6 percent slopes	MkB	Metea loamy sand, moderately permeable, 2 to 6 percent slopes

JASPER COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
Mp, MpA, Pe	Montgomery silty clay loam	Mp	Montgomery silty clay loam
Mu, Ap, Bd, Mx, PyA, Se, SeA	Morocco loamy sand	Mu	Morocco loamy sand
Mw	Muskego muck, drained	Mw	Muskego muck, drained
Gx, Mz	Mussey mucky sandy loam	Mz	Mussey mucky sandy loam
SrA, SpA, SrB, NaB	Nesius loamy fine sand, 1 to 3 percent slopes	NaB	Nesius fine sand, 1 to 3 percent slopes
Ne	Newton fine sandy loam	Ne	Newton loamy fine sand, undrained
PsB, OaB2, PsB2, RsB, RsB2, OaB	Plainfield sand, 2 to 6 percent slopes	OaB	Oakville fine sand, 2 to 6 percent slopes
PsC, TyC2, OaC2, PsC2, TyC, OaC	Plainfield fine sand, 6 to 15 percent slopes	OaC	Oakville fine sand, 6 to 15 percent slopes
PwB, OaA, PtB, ObB	Plainfield sand, wet substratum, 1 to 3 percent slopes	ObB	Oakville sand, moderately wet, 1 to 3 percent slopes
OcC2, OcC	Octagon fine sandy loam, 6 to 12 percent slopes, eroded	OcC2	Octagon fine sandy loam, 6 to 12 percent slopes, eroded
OrB, Do, DoA, FsB, FsB2, FxE, FxB2, FxC, FxC2, OrB2	Ormas loamy fine sand, 2 to 6 percent slopes	OrB	Ormas loamy fine sand, 2 to 6 percent slopes
Su, Df, Rt, RtA, Ve	Strole Variant sandy loam	Pa	Papineau sandy loam
TyB, AsA, AsB, OsB, OsB2, OsC, OsC2, TxB, TyB2, WcB	<i>Tyner Variant loamy sand, 2 to 6 percent slopes</i>	<i>OsB</i>	<i>Ormas Variant loamy sand, 2 to 6 percent slopes</i>

JASPER COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
PdBX	Parr fine sandy loam, 2 to 6 percent slopes	PaB	Parr fine sandy loam, 2 to 6 percent slopes
PdB, OcA, OcB, OcB2, PdB2, PdC, PdC2	Parr fine sandy loam, 2 to 6 percent slopes	PdB	Parr-Ayr complex, 2 to 6 percent slopes
G.P., Pt, Gu, Pf	Gravel pit	Pf	Pits, quarries
PxA	Prochaska loamy sand, frequently flooded	Px	Prochaska loamy sand, frequently flooded
Rd, Du	Reddick silty clay loam	Rd	Reddick silty clay loam
Re, Sg, Rx, Rz	Colwood sandy loam	Re	Rensselaer loam
Rs	Rensselaer loam, till substratum	Rs	Rensselaer fine sandy loam, till substratum
Rw, Wo, Rsh	Colwood loam, till substratum	Rw	Rensselaer, till substratum-Wolcott complex
JrA, Dr, DrA, Jr, Kr, KrA, Ru, RxB, MdA, MdB	McCoysburg fine sandy loam, 0 to 3 percent slopes	RxB	Rockton fine sandy loam, 1 to 3 percent slopes
SmA, FsA	Seward Variant loamy sand, 0 to 2 percent slopes	SmA	Simonin loamy sand, 0 to 2 percent slopes
So, Sk, Sn	Sloan silt loam, frequently flooded	So	Sloan silt loam, frequently flooded, undrained
SpD, DtA, DtB, DtB2, SpB2	Sparta sand, 2 to 6 percent slopes	SpB	Sparta sand, 2 to 6 percent slopes
AaA, SsA, SsB, AeA, AeB	Ade Variant loamy sand, 1 to 3 percent slopes	SsB	Sparta loamy sand, loamy substratum, 1 to 3 percent slopes

JASPER COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
St, Bb, BbA, Ds	Strole clay loam	St	Strole clay loam
Sx	Suman loam, frequently flooded	Sx	Suman loam, frequently flooded
Wb	Warners Variant fine sandy loam	Wb	Warners fine sandy loam
TyB, AsA, AsB, OsB, OsB2, OsC, OsC2, TxB, TyB2, WcB	Tyner Variant Loamy sand, 2 to 6 percent slopes	WcB	Watertown Loamy sand, 2 to 6 percent slopes
We, He	Watseka loamy fine sand	We	Watseka loamy fine sand
Gt, Gs, Wm	Granby loamy sand	Wm	Watseka-Maumee loamy sands
MmB2, MmB, MmC2, MmC3, MnC2, MnC3, WqB, WqB2, WsB2	Miami fine sandy loam, 2 to 6 percent slopes, eroded	WsB2	Wawasee loam, 2 to 6 percent slopes, eroded
Wk, Hm, HmA, Wt	Whitaker fine sandy loam	Wt	Whitaker fine sandy loam
Me, Ck, Pz, Mq, Px, Za	Maumee loamy sand	Za	Zadog-Maumee loamy sands

Series Established by this Correlation:

Iroquois (type location in Jasper County, Indiana)
Nesius (type location in Jasper County, Indiana)
Zadog (type location in Jasper County, Indiana)
Simonin (type location in Jasper County, Indiana)

Series Dropped or Made Inactive:

McCoysburg
Vernigor

Certification Statement:

The state soil scientist certifies that:

1. The soil mapping is complete.
2. Jasper County is joined by Lake and Porter Counties on the north (correlated in 1967 and 1978), Starke, Pulaski, and White on the east (correlated in 1980, 1965, and 1979), and Benton County on the south (correlated in 1985).

The general soil maps join reasonably well except for variation in extent of major soils or changes in concept of series. The interpretations are similar. The detailed maps join quite well in most instances except where similar soils were not correlated on the adjoining county mapping legends, or where very small acreage units were combined with larger ones during correlation. The interpretations are similar in all instances so that no problem of use and management should arise. A detailed join statement is on record.

3. The interpretations are coordinated.
4. The legal descriptions are correct and typical pedon descriptions are from soil areas using the reference name.

Verification of Exact Cooperator Names:

The following will be on the front of the publication:

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 Jasper County Soil and Water Conservation District. Financial assistance was made available by the Jasper County Board of County Commissioners."

Soil Survey Area: Jasper County
State: Indiana

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

Date: 9/82

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)			
Minor civil division		Church			
Reservation (national forest or park, state forest or park, and large airport)		School			
Field sheet matchline & nestline					
AD HOC BOUNDARY (label)		WATER FEATURES		MISCELLANEOUS	
Small airport, airfield, park, oilfield, cemetery, or flood pool		DRAINAGE		Blowout	
STATE COORDINATE TICK (890 000 FEET)		Perennial, double line		Dumps and other similar non soil areas	
LAND DIVISION CORNERS (sections and land grants)		Perennial, single line		Rock outcrop (includes sandstone and shale)	
ROADS		Intermittent		Sandy spot	
Divided (median shown if scale permits)		Drainage end			
County, farm or ranch		Canals or ditches			
ROAD EMBLEMS & DESIGNATIONS		Double - line (label)			
Interstate		Drainage and/or irrigation			
Federal					
State		LAKES, PONDS AND RESERVOIRS		RECOMMENDED AD HOC SOIL SYMBOLS	
RAILROAD		Perennial		Muck spot	
		Intermittent			
		MISCELLANEOUS WATER FEATURES			
		Marsh or swamp			
PITS					
Gravel pit					

SOIL SURVEY JASPER COUNTY, INDIANA

PRIME FARMLAND

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

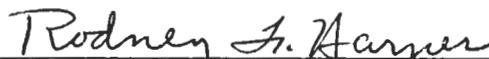
Map symbol	Soil name
AtA	:Andres loam, 0 to 2 percent slopes (where drained)
AyB	:Ayr loamy fine sand, 1 to 4 percent slopes
Br	:Brookston loam (where drained)
CoB	:Corwin loam, moderately permeable, 1 to 3 percent slopes
Cp	:Craigmile sandy loam, frequently flooded (where drained : and either protected from flooding or not frequently : flooded during the growing season)
Dc	:Darroch loam (where drained)
Dq	:Darroch, till substratum-Odell complex (where drained)
Fa	:Faxon loam (where drained)
Gf	:Gilford fine sandy loam (where drained)
GzB	:Grovecity fine sandy loam, 1 to 3 percent slopes (where drained)
Ir	:Iroquois fine sandy loam (where drained)
LuB2	:Lucas silty clay loam, 2 to 6 percent slopes, eroded
MaB	:Markton-Aubbeenaubee complex, 1 to 3 percent slopes
McB	:Martinsville fine sandy loam, 2 to 6 percent slopes
MeA	:Metamora fine sandy loam, moderately permeable, 0 to 1 : percent ^{slopes} (where drained)
MeB	:Metamora fine sandy loam, moderately permeable, 1 to 4 : percent slopes (where drained)
MkB	:Metea loamy sand, moderately permeable, 2 to 6 percent : slopes
Mp	:Montgomery silty clay loam (where drained)
Pa	:Papineau sandy loam (where drained)
PaB	:Parr fine sandy loam, 2 to 6 percent slopes
PdB	:Parr-Ayr complex, 2 to 6 percent slopes
Rd	:Peddick silty clay loam (where drained)
Re	:Rensselaer loam (where drained)
Rs	:Rensselaer fine sandy loam, till substratum (where : drained)
Rw	:Rensselaer, till substratum-Wolcott complex (where : drained)
RxB	:Rockton fine sandy loam, 1 to 3 percent slopes
SmA	:Simonin loamy sand, 0 to 2 percent slopes
St	:Strole clay loam (where drained)

SOIL SURVEY JASPER COUNTY, INDIANA

PRIME FARMLAND--Continued

Map symbol	Soil name
Sx	Suman loam, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
WsB2	Wawasee loam, 2 to 6 percent slopes, eroded
Wt	Whitaker fine sandy loam (where drained)
Za	Zadoc-Maumee loamy sands (where drained)

Approved: September 26, 1985



RODNEY F. HARNER
 Head, Soils Staff
 Midwest NTC

CONVERSION LEGEND FOR
JASPER COUNTY, INDIANA

Field symbol	Publi- cation symbol	Field symbol	Publi- cation symbol	Field symbol	Publi- cation symbol	Field symbol	Publi- cation symbol
AaA	SsB	Cp	Cp	HmA	Wt	MmB2	Wsb2
Ab	Ab	Cr	MaB	Hn	Hp	MmC2	Wsb2
Ac	Ab	CrA	MaB	Ho	Ho	MmC3	Wsb2
Ad	As	CrB	MaB	Hp	Hp	MnC2	Wsb2
AeA	SsB	Dc	Dc	Hu	Ho	MnC3	Wsb2
AeB	SsB	DcA	Dc	Ir	Ir	Mp	Mp
An	As	Df	Pa	Ja	AyB	MpA	Mp
Ap	Mu	Dg	Dg	JaB	AyB	Mr	CoB
As	As	Do	OrB	JaB2	AyB	MrA	CoB
AsA	WcB	DoA	OrB	Jr	RxB	MrB	CoB
AsB	WcB	Dr	RxB	JrA	RxB	MrB2	CoB
AtA	AtA	DrA	RxB	Kr	RxB	MsB	LuB2
Au	MaB	Ds	St	KrA	RxB	MsB2	LuB2
AuA	MaB	DtA	SpB	Ky	Dc	MtA	CoB
AuB	MaB	DtB	SpB	KyA	Dc	MtB	CoB
AvA	MaB	DtB2	SpB	KyB	Dc	MtB2	CoB
AvB	MaB	Du	Rd	LuB2	LuB2	MtC2	LuB2
AyA	AyB	Ed	Ed	MaA	MaB	Mu	Mu
AyB	AyB	Fa	Fa	MaB	MaB	Mw	Mw
AyB2	AyB	Fo	Dc	MbA	MeA	Mx	Mu
AzA	MeA	FoA	Dc	McA	McB	Mz	Mz
Bb	St	FoB	Dc	McB	McB	NaB	NaB
BbA	St	FoB2	Dc	McB2	McB	Ne	Ne
Ba	Mu	FsA	SmA	McC	McB	OaA	ObB
Be	BeB	FsB	OrB	McC2	McB	OaB	OaB
BeA	BeB	FsB2	OrB	McC3	McB	OaB2	OaB
BeB	BeB	FxB	OrB	McCD2	McB	OaC	OaC
BmA	BeB	FxB?	OrB	MdA	RxB	OaC2	OaC
BoA	BeB	FxC	OrB	MdB	RxB	ObB	ObB
Br	Br	FxC2	OrB	Me	Za	OcA	PdB
ChB	ChB	G.P.	Pf	MeA	MeA	OcB	PdB
ChC	ChB	Gf	Gf	MeB	MeB	OcB2	PdB
Ck	Za	Gs	Wm	Mf	Ed	OcC	OcC2
Cm	Cp	Gt	Wm	Mg	Za	OcC2	OcC2
Cn	MeB	Gx	Mz	Mk	MkB	CeA	Dg
CnA	MeB	Gz	GzB	MkA	MkB	OrB	OrB
Co	CoB	GzB	GzB	MkB	MkB	OrB2	OrB
CoA	CoB	HaA	MaB	MkB2	MkB	OsB	WcB OtB
CoB	CoB	He	We	MkC2	MkB	OsB2	WcB OtB
CoB2	CoB	Hm	Wt	MmB	Wsb2	OsC	WcB OtB

JASPER COUNTY, INDIANA --Continued

Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
OsC2	UcB Otb	Se	Mu	Za	Za		
QwB	MkB	SeA	Mu				
Pa	As	Sg	Re				
PdB	PdB	Sh	MaB				
PdB2	PdB	ShA	MaB				
PdBX	PaB	Sk	So				
PdC	PdB	SmA	SmA				
PdC2	PdB	Sn	So				
Pe	Mp	So	So				
Pf	Pf	SpA	NaB				
PsB	OaB	SpB	SpB				
PsB2	OaB	SpB2	SpB				
PsC	OaC	SrA	NaB				
PsC2	OaC	SrB	NaB				
Pt	Pf	SsA	SsB				
PtB	ObB	SsB	SsB				
PwB	ObB	St	St				
Px	Za	Su	Pa				
PxA	Px	Sx	Sx				
Pz	Za	Tt	Ab				
Qu	Pf	TxB	UcB OIB				
Rd	Rd	TyB	UcB Otb				
Re	Re	TyB2	UcB Otb				
Ro	Ir	TyC	OaC				
Rr	Fa	TyC2	OaC				
Rs	Rs	Ve	Pa				
RsB	OaB	Wa	Ho				
RsB2	OaB	Wb	Wb				
Psw	Rw	WcB	UcB Otb				
Rt	Pa	Wd	Br				
RtA	Pa	We	We				
Ru	RxB	Wf	Ir				
Rw	Rw	WgB	WsB2				
Rx	Re	WgB2	WsB2				
RxB	RxB	Wh	Br				
RyA	Mu	Wk	Wt				
Rz	Re	Wm	Wm				
Sb	LUB2	Wo	Rw				
SbB	LUB2	WsB2	WsB2				
SbB2	LUB2	Wt	Wt				

CLASSIFICATION OF PEDONS SAMPLED
FOR LABORATORY ANALYSIS

Pedons Characterized at Purdue
and National Soil Survey Laboratory

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Ade Variant	S80IN-73-19	SsB	Sparta loamy sand, loamy substratum
Odell	S78IN-73-9	AtA	Andres, slightly thinner solum than defined for Andres and lacks a 3Bt horizon in the lower materials ^{1/}
Aubbeenaubbee	S80IN-73-27	MaB	Aubbeenaubbee
Ayr	S79IN-73-25	AyB	Ayr taxadjunct, sandy over loamy, mixed, mesic Mollic Hapludalfs
Brookston	S79IN-73-23	Br	Brookston ^{1/}
Chelsea	S80IN-73-10	ChB	Chelsea, upper 30 inches have slightly less than 50 percent fine sand ^{1/}
Craigmile	S80IN-73-3	Cp	Craigmile taxadjunct, coarse-loamy, mixed, mesic Fluvaquentic Haplaquolls ^{1/}
Corwin	S78IN-73-10	CoB	Corwin ^{1/}
Rensselaer Var.	S89IN-73-15	Fa	Faxon ^{1/}
Gilford	S80IN-73-5	Gf	Gilford ^{1/}
Griswold	S80IN-73-24	GzB	Grovecity ^{1/}
Montmorenci	S79IN-73-31	LuB2	Haskins taxadjunct, fine-loamy, mixed mesic Mollic Hapludalfs, inclusion in map unit of Lucas
Rensselaer	S79IN-73-14	Ir	Iroquois ^{1/2/}

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Saylesville Variant	S80IN-73-26	LuB2	Lucas ^{1/}
Martinsville	S79IN-73-26	McB	Martinsville, slightly less clay than defined range of series ^{1/}
Prochaska	S79IN-73-38	Za	Maumee ^{1/}
Jasper Variant	S80IN-73-16	RxB	Rockton, has lower clay content directly above bedrock than typical for series
Ayr Variant	S80IN-73-23	MeA	Metamora taxadjunct, coarse-loamy, mixed, mesic Typic Argiudolls
Conover	S79IN-73-30	MeB	Metamora taxadjunct, fine-loamy, mixed, mesic Aquollic Hapludalfs ^{1/}
Metea	S79IN-73-29	MkB	Metea, slightly less clay than defined for the Metea series in 2Bt and 2C horizons ^{1/}
*Miami	S81IN-73-2	WsB2	Wawasee ^{1/}
Miami	S79IN-73-28	WsB2	Wawasee
Montgomery	S79IN-73-11	Mp	Montgomery, slightly less clay than defined range for the Montgomery series ^{1/}
Morocco	S78IN-73-1	Mu	Morocco ^{1/}
Sparta Variant	S79IN-73-17	NaB	Nesius taxadjunct, too low in bases, sandy, mixed, mesic Entic Haplumbrepts
Newton	S80IN-73-17	Ne	Newton ^{1/}
Octagon	S79IN-73-21	OcC2	Octagon ^{1/}
Ormas	S80IN-73-9	OrB	Ormas ^{1/}

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Parr	S80IN-73-28	PdB	Parr ^{1/}
Parr	S79IN-73-22	PdB	Parr, Bt horizons in least clayey part of range for series.
Plainfield	S78IN-73-3	OaC	Oakville
Plainfield	S80IN-73-2	ObB	Oakville
Drummer	S78IN-73-8	Rd	Reddick ^{1/}
Rensselaer	S80IN-73-14	Re	Rensselaer ^{1/}
Seward Variant	S79IN-73-15	SmA	Simonin ^{1/2/}
Sparta	S79IN-73-24	SpB	Sparta ^{1/}
Strole	S80IN-73-29	St	Strole ^{1/}
Strole Variant	S80IN-73-22	Pa	Papineau taxadjunct fine-loamy (marginal to fine) mixed, mesic Aquic Argiudolls ^{1/}
Tyner Variant	S80IN-73-8	^{OaB} WcB	Watertown ^{1/} <i>Omaha Variant^{1/}</i>
Watseka	S80IN-73-6	We	Watseska ^{1/}
Whitaker	S79IN-73-33	Wt	Whitaker, more acid sola, thinner solum and slightly more gravel within solum than typical for Whitaker series ^{1/}
*Wolcott	S82IN-73-20	Rw	Wolcott ^{1/}
*Iroquois	S82IN-73-25	Ir	Iroquois taxadjunct, coarse-loamy, mixed, mesic Typic Haplaquolls

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
*Vernigor	S82IN-73-24	Pa	Papineau taxadjunct, fine-loamy, mixed, mesic Aquic Argiudolls (marginal fine), upper portion of solum contained too much clay for the 40-inch control section to qualify for contrasting textures ^{1/}
*Zadog	S81IN-73-4	Za	Zadog, clay increase not believed genetic, and not considered as a true reflection of the clay content of the soil ^{1/2/}

ADDITIONAL LABORATORY DATA TO
CHARACTERIZE SOIL MAP UNITS

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Aubbeenaubbee	S79IN-73-32	MaB	Aubbeenaubbee, solum thinner than defined for series, loamy sand Ap and B1 not allowed in series definition
Ayr	S80IN-73-7	AyB	Ayr taxadjunct, fine-loamy, mixed, mesic Typic Argiudolls
Brems	S78IN-73-4	BeB	Brems
Darroch	S79IN-73-16	Dc	Strole taxadjunct, clayey over loamy illitic, mesic Aquic Argiudolls, inclusion in map unit of Darroch
Jasper	S79IN-73-35	PdB	Jasper taxadjunct, coarse-loamy, mixed, mesic Typic Argiudolls, inclusion in map unit of Parr-Ayr complex
Kibbie	S79IN-73-34	Dc	Hoopeston taxadjunct, fine-silty over sandy or sandy skeletal, mixed, mesic Aquollic Hapludalfs, inclusion in map unit of Darroch
Martinsville	S79IN-73-27	McB	Martinsville, somewhat more silt in Bt than typical
Roby (Morocco Variant)	S79IN-73-18	Mu	Morocco
Octagon	S79IN-73-20	PdB	Parr
Odell	S80IN-73-25	Dg	Odell taxadjunct, coarse-loamy, mixed, mesic Aquic Hapludolls, inclusion in map unit of Darroch-Odell complex

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
*Odell	S82IN-73-18	Dg	Andres, solum too thin, inclusion in map unit of Darroch-Odell complex
Plainfield	S78IN-73-2	OaB	Plainfield, inclusion in map unit of Oakville
Rensselaer	S80IN-73-21	Re	Selma, minimal clay content in control section, inclusion in map unit of Rensselaer loam
Rensselaer	S79IN-73-13	Rw	Selma, inclusion in Rensselaer-Wolcott complex
Sloan	S79IN-73-36	So	Cohoctah, inclusion in map unit of Sloan
Strole	S79IN-73-12	St	Strole
Suman	S79IN-73-37	Sx	Suman taxadjunct, sandy, mixed, mesic Fluvaquentic Haplaquolls
Granby	S79IN-73-9	Wm	Watseka
*Wolcott	S81IN-73-66	Rw	Brookston, argillic horizon is thinner than defined for Brookston, inclusion in map unit of Rensselaer-Wolcott complex
Prochaska Variant	S80IN-73-13	Za	Zadog, marginal to sandy particle size class family
Partial Date - SCS-8 forms not completed			
*Nesius	S82IN-73-22	NaB	Nesius ^{1/2/}
Rensselaer	S82IN-73-3	Rs	Rensselaer
Rensselaer	S82IN-73-5	Rs	Rensselaer

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Rensselaer	S82IN-73-6	Rs	Rensselaer
Rensselaer	S82IN-73-7	Rs	Rensselaer
Rensselaer	S82IN-73-14	Rw	Rensselaer
Rensselaer	S82IN-73-15	Rw	Rensselaer
Rensselaer	S82IN-73-16	Rw	Rensselaer

*Laboratory data from NSSL at Lincoln, Nebraska.

1/Representative pedon for the series in Jasper County.

2/Type location for the series.

NOTES TO ACCOMPANY CLASSIFICATION AND CORRELATION
OF THE SOILS OF JASPER COUNTY, INDIANA

by

Robert I. Turner and David A. Tuszynski

ANDRES SERIES

Andres soils have slightly thinner sola than the defined range for the Andres series but are not considered taxadjuncts. In addition, they have a minimum depth to free carbonates for the Andres series and lack a 3Bt horizon in the lower material, although this material is at depths of less than 40 inches.

AUBBEENAUBBEE SERIES

Aubbeenaubbee soils have thinner sola and are shallower to free carbonates than defined for the series. They are similar to the Crosier series but have more sand in the A and upper part of the Bt horizon than allowed in the Crosier series. In addition to the higher sand content in the upper part of the solum the upper boundary of the Bt horizon is slightly deeper than in the Crosier soils.

CHELSEA SERIES

Chelsea soils are less acid than the defined range for the Chelsea series, but we did not call them taxadjuncts. The upper 2 1/2 feet fail the fine sand texture by a few percent of fine sand.

CRAIGMILE SERIES

This map unit previously named Cohoctah was deemed more similar in behavior to the Craigmile series. These soils are taxadjuncts to the Craigmile series because they lack contrasting textures due to the larger amount of fine and coarser sand in the upper loamy material. These soils would classify in the coarse-loamy family rather than the coarse-loamy over sandy or sandy-skeletal as defined for the Craigmile series. They contain more sand within the lower part of the control section than is defined for the Cohoctah series. They also contain more fine and coarser sand in the sandy loam horizons than allowed in the Cohoctah series.

FAXON SERIES

Faxon soils are in a climatic area with slightly higher mean annual precipitation than is defined for the Faxon series and, in addition, are in the warmest part of the climatic range for the Faxon series. The surface horizon is slightly more acid than defined for this series. We have not identified these soils as taxadjuncts for these reasons.

GROVECITY SERIES

Grovecity soils were previously recommended for correlation as Granby Variant. The recently established Grovecity appears to fit the properties of the few hundred acres in this survey area. Grovecity soils are in a climatic area with slightly higher mean annual precipitation than is defined for the Grovecity series and, in addition, are in the warmest part of the climatic range for the Grovecity series.

HOUGHTON SERIES

This unit was evidently developed in a ponded area although it is now being drained by the Iroquois River. Indiana indicates ponding and flooding are approximately equal hazards and for that reason are naming it as a flooded phase.

IROQUOIS SERIES

This is a newly proposed series being established in this survey area. It consists of loamy sediments over clayey lacustrine materials.

MARTINSVILLE SERIES

Martinsville soils are in the thinnest part of the range in solum thickness and depth to free carbonates defined for the Martinsville series. They also tend to have slightly less clay than typical for this series.

METAMORA SERIES

Map unit MeB soils are taxadjuncts to the Metamora series as they lack sufficient gray mottles to fit the definition for Metamora. They classify as fine-loamy, mixed, mesic Aquollic Hapludalfs. The water table depths are approximately the same as for the Metamora series and the interpretations are similar. Map unit MeA soils are also taxadjuncts to the Metamora series in that they have less clay, slightly darker surface, and browner B horizons in the upper part of the solum than defined for the Metamora series. These soils would classify as coarse-loamy, mixed, mesic Typic Argiudolls.

METEA SERIES

Metea soils have slightly less clay than defined for the Metea series, but we have not called them taxadjuncts on that account.

MONTGOMERY SERIES

These soils have slightly less clay in the B horizon than defined for the Montgomery series. The clay content is similar to that of Milford, a closely similar series. However, the permeability, solum thickness, and depth to free carbonates are more like that of the Montgomery series and we continued with that name without calling it a taxadjunct.

MOROCCO SERIES

Morocco soils are in the most acid part of the range for this series and they have loamy fine sand textures in the uppermost part of the control section, but we did not call them taxadjuncts on that account.

MUSSEY SERIES

Mussey soils have thinner argillic horizons than defined for the Mussey series and the surface horizon contains more organic carbon than allowed in the Mussey series. In addition, these soils have browner colors in the C horizons and appear to be leached of free carbonates to greater depths than defined for the Mussey series. We have not called them taxadjuncts on the basis of these properties.

NESSIUS SERIES

This newly proposed series consists of moderately well drained sandy soils with dark colored surfaces. They have a morphology quite similar to the Sparta series but drainagewise are quite similar to the Watseka series. They are being established in this survey area and have water tables as

shallow as approximately 2 feet. Included in map units of Nesius soils are some sandy soils with dark colored surfaces that lack mollic epipedon due to lower base saturation than defined for a mollic epipedon.

OCTAGON SERIES

These soils have more sand in the A horizon and more sand and less clay in the B horizon than defined for the Octagon series. A new IRD 2/84 expanded the range to cover the soils in this survey area.

PAPINEAU SERIES

The tentative Vernigor series is being dropped and the Papineau series used in its place. The present pedon being used is a taxadjunct to the Papineau series as it fails the contrasting textural family. The pedon classifies as fine-loamy (marginal fine) mixed, mesic Aquic Argiudolls. These soils are composed of loamy outwash and underlying clayey sediments. Whether they fit the narrow slot of contrasting textures depends on the clay content of the loamy outwash and thickness thereof, abruptness of boundary to lower material and texture of lower material. Obviously all combinations are possible and on the average don't seem significantly different from the range one would expect to find in map units identified with the Papineau name.

ROCKTON SERIES

Rockton soils in this area are formed in outwash material over limestone bedrock. They differ from the normal Rockton series in that they lack a thin subhorizon formed partially in the clayey residuum from the weathering of limestone that is typical for the Rockton series. Similar soils were correlated as Rockton in Kankakee County, Illinois, and for that reason we are continuing with the use of the Rockton name for the 2,000 acres in this survey area. The proposed McCoysburg series is being correlated as Rockton.

RENSSELAER SERIES

When the Rensselaer series is updated it should provide for the various kinds of substrata that we are using with it. These soils have less clay than presently defined for the Rensselaer series. A new draft has been sent around for review that does contain this range in clay content. The texture of the surface soil in map unit Rs tends to be coarser than for the other map units of Rensselaer in this survey area. The texture is marginal to fine sandy loam and we have renamed this map unit to reflect that difference.

SIMONIN SERIES

waterlaid
This newly proposed series consists of moderately well drained soils formed in sandy waterlaid or windworked material and clayey sediments. This soil is also being mapped in Newton County, Indiana. Acreage exceeds 2,000 acres.

SPARTA SERIES

Sparta soils are less acid than the defined range for the Sparta series. Map unit SsB previously identified as Ade variant is being correlated as a loamy substratum phase of the Sparta series. There are approximately 1,000 acres and the interpretations are similar to this phase of the Sparta series. Map unit SsB has some evidence that seems to indicate that the substrata material has some genetic development. Generally loamy substratum phases of the Sparta series are not considered to have significant genetic

development and, from that standpoint, this phase may be a typical. However, we did not consider it significant enough to acknowledge it in any other way than as a note in this correlation.

WARNERS SERIES

Warners soils are taxadjuncts to the Warners series as they have more sand and less clay than defined for the Warners series. They would classify as coarse-loamy, carbonic^{ate}, mesic Fluvaquentic Haplaquolls. *carbonatic,*

WATERTOWN SERIES

~~Watertown soils are slightly more acid in the surface horizons and somewhat less acid in the lower part of the solum than defined for the Watertown series. In addition, they are considerably shallower to free carbonates than typical for the Watertown series and contain a minimal amount of gravel for the Watertown series. The acreage is small and interpretations are similar and we did not choose to call them a taxadjunct.~~

WAWASEE SERIES

Soils formerly named Miami were restudied and judged to be within the range of the Wawasee series.

WHITAKER SERIES

Whitaker soils have slightly thinner sola and are more acid in the lower part of the B horizon and the C horizon than typical for the Whitaker series, but we did not call them taxadjuncts on that account. In addition, they contain more gravel throughout the solum than considered typical for the Whitaker series.

ZADOG SERIES

This newly proposed series is being established in this county. It consists of a sandy loam upper mantle and a sandy lower mantle. The sandy loam upper mantle contains an accumulation of iron in its lower part. These soils were mined for iron off and on during the Second World War. There is not enough accumulation of iron to constitute a spodic horizon. The clay increase in typical pedon is not considered genetic nor is the total clay believed a true characterization of the properties of the B horizon. There is evidence from NSSL that an appreciable amount of the free iron is showing up as clay sized material in the normal particle size analysis. This material (clay sized iron) does not influence texture, consistence and texture in the same way that 2 micron lattice clay does and it is being discounted in placing in a particle-size class family.

SOIL SURVEY JASPER COUNTY, INDIANA

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
Ackerman-----	Sandy, mixed, mesic Histic Humaquepts
Adrian-----	Sandy or sandy-skeletal, mixed, euic, mesic Terric Medisaprists
Andres-----	Fine-loamy, mixed, mesic Aquic Argiudolls
Aubbeenaubee	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Ayr-----	Sandy over loamy, mixed, mesic Typic Argiudolls
Brems-----	Mixed, mesic Aquic Udipsamments
Brookston----	Fine-loamy, mixed, mesic Typic Argiaquolls
Chelsea-----	Mixed, mesic Alfic Udipsamments
Corwin-----	Fine-loamy, mixed, mesic Typic Argiudolls
*Craigmile----	Coarse-loamy over sandy or sandy-skeletal, mixed, mesic Fluvaquentic Haplaquolls
Darroch-----	Fine-loamy, mixed, mesic Aquic Argiudolls
Edwards-----	Marly, euic, mesic Limnic Medisaprists
Faxon-----	Fine-loamy, mixed, mesic Typic Haplaquolls
Gilford-----	Coarse-loamy, mixed, mesic Typic Haplaquolls
Grovecity----	Coarse-loamy, mixed, mesic Aquic Hapludolls
Houghton-----	Euic, mesic Typic Medisaprists
Iroquois-----	Fine-loamy over clayey, mixed, mesic Typic Argiaquolls
Lucas-----	Fine, illitic, mesic Typic Hapludalfs
Markton-----	Loamy, mixed, mesic Aquic Arenic Hapludalfs
Martinsville	Fine-loamy, mixed, mesic Typic Hapludalfs
Maumee-----	Sandy, mixed, mesic Typic Haplaquolls
*Metamora-----	Fine-loamy, mixed, mesic Udollic Ochraqualfs
Metea-----	Loamy, mixed, mesic Arenic Hapludalfs
Montgomery---	Fine, mixed, mesic Typic Haplaquolls
Morocco-----	Mixed, mesic Aquic Udipsamments
Muskego-----	Coprogenous, euic, mesic Limnic Medisaprists
Mussey-----	Fine-loamy over sandy or sandy-skeletal, mixed, mesic Typic Argiaquolls
Nesius-----	Sandy, mixed, mesic Entic Hapludolls
Newton-----	Sandy, mixed, mesic Typic Humaquepts
Oakville-----	Mixed, mesic Typic Udipsamments
Octagon-----	Fine-loamy, mixed, mesic Mollic Hapludalfs
Odell-----	Fine-loamy, mixed, mesic Aquic Argiudolls
Ormas-----	Loamy, mixed, mesic Arenic Hapludalfs

SOIL SURVEY JASPER COUNTY, INDIANA

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
<i>Ormae Variant</i>	<i>Sandy, mixed, mesic Psammentic Hapludalfs</i>
*Papineau-----	Fine-loamy over clayey, mixed, mesic Aquic Argiudolls
Parr-----	Fine-loamy, mixed, mesic Typic Argiudolls
Prochaska----	Sandy, mixed, mesic Fluvaquentic Haplaquolls
Reddick-----	Fine-loamy, mixed, mesic Typic Haplaquolls
Rensselaer---	Fine-loamy, mixed, mesic Typic Argiaquolls
Rockton-----	Fine-loamy, mixed, mesic Typic Argiudolls
Simonin-----	Coarse-loamy over clayey mixed, mesic Typic Argiudolls
Sloan-----	Fine-loamy, mixed, mesic Fluvaquentic Haplaquolls
Sparta-----	Sandy, mixed, mesic Entic Hapludolls
Strole-----	Fine, illitic, mesic Aquic Argiudolls
Suman-----	Fine-loamy over sandy or sandy-skeletal, mixed, mesic Fluvaquentic Haplaquolls
*Warners-----	Fine-silty, carbonatic, mesic Fluvaquentic Haplaquolls
Watertown----	Sandy, mixed, mesic Psammentic Hapludalfs
Watseka-----	Sandy, mixed, mesic Aquic Hapludolls
Wawasee-----	Fine-loamy, mixed, mesic Typic Hapludalfs
Whitaker-----	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Wolcott-----	Fine-loamy, mixed, mesic Typic Haplaquolls
Zadog-----	Coarse-loamy, mixed, mesic Typic Haplaquolls