

FILE COPY

CLASSIFICATION AND CORRELATION

OF

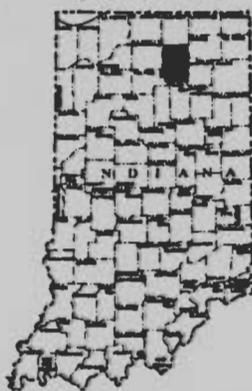
THE SOILS OF

FILE COPY

**KOSCIUSKO COUNTY
INDIANA**

APRIL 1985

LOCATION



FILE COPY

FILE COPY

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

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

Classification and Correlation
of the Soils of
Kosciusko County, Indiana

A correlation conference was held at the MNTC in Lincoln, Nebraska, August 27-31, 1984. Participating were Larry R. Staley, party leader; Jerry D. Larson, soils specialist; and Robert I. Turner, soil correlator. The documentation on which the correlation is based are the field correlation, draft of the manuscript, correlation samples, soil interpretation records, and field sheets. Mr. Turner participated on the comprehensive field review the week of November 18-19, 1981, and a progress field review May 9-13, 1983.

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 soil name. The lowercase 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 for nearly level soils or miscellaneous areas. A final number 2 in the symbol indicates that the soil is eroded and 3 that it is severely eroded.

SOIL CORRELATION OF
KOSCIUSKO COUNTY, INDIANA

Field symbols	Field map unit name	Publi- cation: symbol	Approved map unit name
Ab, St	Abscota loamy fine sand, occasionally flooded	Ab	Abscota fine sandy loam, occasionally flooded
Of	Aquents-Urban land complex, rarely flooded	Ao	Aquents-Urban land complex, rarely flooded
As4	Aubbeenaubbee sandy loam, 0 to 2 percent slopes	ArA	Aubbeenaubbee sandy loam, 0 to 2 percent slopes
At	Aubbeenaubbee sandy loam, moderately permeable substratum, 0 to 2 percent slopes	AtA	Aubbeenaubbee sandy loam, moderately permeable, 0 to 2 percent slopes
Bz	Barry loam	Bc	Barry loam
BaA	Blount silt loam, 0 to 2 percent slopes	BlA	Blount silt loam, 0 to 2 percent slopes
BaB2	Blount-Glynwood complex, 1 to 3 percent slopes, eroded	BnB	Blount-Glynwood complex, 1 to 3 percent slopes
BoB, BoB2, BoA	Boyer loamy sand, 2 to 6 percent slopes	BoB	Boyer loamy sand, 0 to 6 percent slopes
BoC, BoC2	Boyer loamy sand, 6 to 12 percent slopes	BoC	Boyer loamy sand, 6 to 12 percent slopes
Bp	Brady sandy loam	Bp	Brady sandy loam
RxA, Bx	Bronson sandy loam, 0 to 2 percent slopes	BrA	Bronson sandy loam, 0 to 2 percent slopes
EhA, VoA, VoB	Carmi loam, 0 to 2 percent slopes	CaA	Carmi loam, 0 to 2 percent slopes
ChB, ChA, ChB2	Coloma loamy sand, 0 to 6 percent slopes	ClB	Coloma loamy sand, 0 to 6 percent slopes

KOSCIUSKO COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
ChC, ChC2	Coloma loamy sand, 6 to 12 percent slopes	ClC	Coloma loamy sand, 6 to 12 percent slopes
CrA	Crosier loam, 0 to 2 percent slopes	CrA	Crosier loam, 0 to 1 percent slopes
CrB	Crosier loam, 2 to 4 percent slopes	CrB	Crosier loam, 1 to 4 percent slopes
De, DeA	Del Rey silt loam	De	Del Rey silt loam
Ed	Edwards muck, drained	Ed	Edwards muck, drained
Gf	Gilford sandy loam, gravelly substratum	Gf	Gilford sandy loam, gravelly substratum
Gm	Gilford mucky sandy loam, gravelly substratum	Gm	Gilford mucky sandy loam, gravelly substratum
Gk	Gravelton sandy loam, frequently flooded	Go	Gravelton loamy sand, occasionally flooded
Gn	Gravelton-Adrian Variant complex, frequently flooded	Gr	Gravelton-Palms, gravelly substratum, complex, frequently flooded
PrA, PrB	Griswold loam, 1 to 2 percent slopes	GtA	Griswold loam, 0 to 2 percent slopes
Hk, Hj, Sg	Histosols and Aquolls	He	Histosols and Aquolls
Ho	Homer sandy loam	Ho	Homer sandy loam
Ht	Houghton muck	Ht	Houghton muck
Hx	Houghton muck, drained	Hx	Houghton muck, drained
FoA	Kosciusko sandy loam, 0 to 2 percent slopes	KoA	Kosciusko sandy loam, 0 to 2 percent slopes

KOSCIUSKO COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
FoB	Kosciusko sandy loam, 2 to 6 percent slopes	KoB	Kosciusko sandy loam, 2 to 6 percent slopes
FoC2, FoC	Kosciusko sandy loam, 6 to 12 percent slopes, eroded	KoC	Kosciusko sandy loam, 6 to 12 percent slopes
KoE	Kosciusko sandy loam, 18 to 30 percent slopes	KoE	Kosciusko sandy loam, 18 to 30 percent slopes
FtA	Kosciusko silt loam, 0 to 2 percent slopes	KtA	Kosciusko silt loam, 0 to 2 percent slopes
FxC3, FoC3, FxD3, FoD3	Kosciusko sandy clay loam, 8 to 15 percent slopes, severely eroded	KxC3	Kosciusko sandy clay loam, 8 to 15 percent slopes, severely eroded
MaA	Martinsville sandy loam, 0 to 2 percent slopes	MaA	Martinsville sandy loam, 0 to 2 percent slopes
MaB, MaB2	Martinsville sandy loam, 2 to 6 percent slopes	MaB	Martinsville sandy loam, 2 to 6 percent slopes
MaC, MaC2	Martinsville sandy loam, 6 to 12 percent slopes	MaC	Martinsville sandy loam, 6 to 12 percent slopes
PoA	Polerun loamy fine sand, 0 to 2 percent slopes	MbA	Metea loamy sand, 0 to 2 percent slopes
PoB	Polerun loamy fine sand, 2 to 6 percent slopes	MbB	Metea loamy sand, 2 to 6 percent slopes
PoC	Polerun loamy fine sand, 6 to 12 percent slopes	MbC	Metea loamy sand, 6 to 12 percent slopes

KOSCIUSKO COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
MgA	Metea loamy fine sand, 0 to 2 percent slopes	MeA	Metea loamy fine sand, moderately slowly permeable, 0 to 2 percent slopes
MgB	Metea loamy fine sand, 2 to 6 percent slopes	MeB	Metea loamy fine sand, moderately slowly permeable, 2 to 6 percent slopes
MgC	Metea loamy fine sand, 6 to 12 percent slopes	MeC	Metea loamy fine sand, moderately slowly permeable, 6 to 12 percent slopes
MmB, MmB2	Miami loam, 2 to 6 percent slopes	MLB	Miami loam, 2 to 6 percent slopes
MmC, MmC2	Miami loam, 6 to 12 percent slopes	MLC	Miami loam, 6 to 12 percent slopes
MoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	MrC3	Miami clay loam, 6 to 12 percent slopes, severely eroded
MoD3, MmE3, MoE3, MmD, MmD2, MmE2	Miami clay loam, 12 to 18 percent slopes, severely eroded	MrD3	Miami clay loam, 12 to 18 percent slopes, severely eroded
MpB, MpB2	Wawasee-Rawson Variant-Metea complex, 2 to 8 percent slopes	MsB	Miami-Owosso-Metea complex, 2 to 8 percent slopes
MpD, MpD2	Wawasee-Rawson-Metea complex, 10 to 25 percent slopes	MsD	Miami-Owosso-Metea complex, 10 to 25 percent slopes
MtC, MtC2	Morley loam, 6 to 12 percent slopes	MvC	Morley loam, 6 to 12 percent slopes
MxC3, MxB3	Morley silty clay loam, 5 to 15 percent slopes, severely eroded	MxC3	Morley silty clay loam, 5 to 15 percent slopes, severely eroded

KOSCIUSKO COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
MxD3	Morley silty clay loam, 15 to 25 percent slopes, severely eroded	MxD3	Morley silty clay loam, 15 to 25 percent slopes, severely eroded
MtB, MtB2	Morley-Glynwood complex, 1 to 4 percent slopes	MzB	Morley-Glynwood complex, 1 to 4 percent slopes
OsA	Ormas loamy sand, 0 to 2 percent slopes	OrA	Ormas loamy sand, 0 to 2 percent slopes
OsB, OsB2	Ormas loamy sand, 2 to 6 percent slopes	OrB	Ormas loamy sand, 2 to 6 percent slopes
OsC, OsC2	Ormas loamy sand, 6 to 12 percent slopes	OrC	Ormas loamy sand, 6 to 12 percent slopes
OsA4	Ormas loamy sand, sandy substratum, 0 to 2 percent slopes	OtA	Ormas loamy sand, sandy substratum, 0 to 2 percent slopes
OsB4, OsB24	Ormas loamy sand, sandy substratum, 2 to 6 percent slopes	OtB	Ormas loamy sand, sandy substratum, 2 to 6 percent slopes
OsC4, OsC24	Ormas loamy sand, sandy substratum, 6 to 12 percent slopes	OtC	Ormas loamy sand, sandy substratum, 6 to 12 percent slopes
Pm	Palms muck, drained	Pa	Palms muck, drained
Am	Adrian Variant muck, drained	Pb	Palms muck, gravelly substratum, drained
PW	Pewamo silty clay loam	Pe	Pewamo silty clay loam
Pt, Go	Pits, gravel	Pg	Pits, gravel
Re	Rensselaer loam	Re	Rensselaer loam
RsA	Riddles sandy loam, friable substratum, 0 to 2 percent slopes	RLA	Riddles fine sandy loam, 0 to 2 percent slopes

KOSCIUSKO COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
RxB	Riddles sandy loam, friable substratum, 2 to 6 percent slopes	RLB	Riddles fine sandy loam, 2 to 6 percent slopes
PxC	Riddles sandy loam, friable substratum, 6 to 12 percent slopes	RLC	Riddles fine sandy loam, 6 to 12 percent slopes
RxD	Riddles sandy loam, friable substratum, 12 to 18 percent slopes	RLD	Riddles fine sandy loam, 12 to 18 percent slopes
RxB, RxB2	Riddles, friable substratum-Ormas-Kosciusko complex, 2 to 6 percent slopes	RxB	Riddles-Ormas-Kosciusko complex, 2 to 6 percent slopes
RxC, RxC2	Riddles, friable substratum-Ormas-Kosciusko complex, 6 to 12 percent slopes	RxC	Riddles-Ormas-Kosciusko complex, 6 to 12 percent slopes
So, Sl	Sloan silt loam, gravelly substratum, occasionally flooded	Sa	Saranac clay loam, gravelly substratum, occasionally flooded
Se, Wj, Wp	Sebewa loam	Se	Sebewa loam
Sf	Sebewa mucky loam	Sf	Sebewa mucky loam
ShA, WhA, WqA	Shipshe sandy loam, 0 to 2 percent slopes	ShA	Shipshe sandy loam, 0 to 2 percent slopes
ShB, WgB, WhB	Shipshe sandy loam, 2 to 6 percent slopes	ShB	Shipshe sandy loam, 2 to 6 percent slopes
Sn, Sh	Shoals loam, gravelly substratum, occasionally flooded	Sn	Shoals loam, gravelly substratum, occasionally flooded
Le, Ms, Mx	Lenawee silty clay loam	To	Toledo silty clay

KOSCIUSKO COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
Ud, SLF	Udorthents, loamy	Ud	Udorthents, loamy
Oe	Udorthents- Udipsamments	Uf	Udorthents-Urban land complex
Wa	Wallkill silt loam	Wa	Wallkill silt loam
Wm, Wh	Washtenaw silt loam	Wc	Washtenaw silt loam
Wo	Washtenaw Variant silt loam	We	Washtenaw loam, gravelly substratum
MkB	Wawasee sandy loam, 2 to 6 percent slopes	WLB	Wawasee fine sandy loam, 2 to 6 percent slopes
MkC, MkC2	Wawasee sandy loam, 6 to 12 percent slopes	WLC2	Wawasee fine sandy loam, 6 to 12 percent slopes, eroded
MkD2, MkD	Wawasee sandy loam, 12 to 18 percent slopes, eroded	WLD2	Wawasee fine sandy loam, 12 to 18 percent slopes, eroded
Wt, Wk	Whitaker loam	Wt	Whitaker loam

Series Established by This Correlation:

Gravelton (type location in Kosciusko County, Indiana)

Series Dropped or Made Inactive:

Epworth
Polerun

Certification Statement:

The state soil scientist certifies that:

1. Mapping was completed on June 22, 1983.
2. The general soil map for general planning has been joined to the map for the completed Elkhart County, Marshall County, Fulton County, Wabash County, Whitley County, and Noble County. All lines join across county boundaries. The names of some map units have some differences because of changes in concept, design of the map units, newly established series, and proportion of soils within the map units. The associations have similar soils. A detailed account of the joins is attached to the report of field correlation and final field review.

The detailed maps have been joined and colored checked to prove that each unit is a closed delineation. All lines join. In some cases, map units were not on the soil identification legend of Kosciusko County. Elkhart County has compilation errors along the Kosciusko County line. Some map units did not come across the county line into Kosciusko County. The soils in Kosciusko County, or in the adjoining county, are part of a complex map unit. A detailed account of the joins is attached to the report of field correlation and final field review.

3. Interpretations have been checked and the interpretations that will be used are those that are on the Soil Interpretation Records.

4. The location of pedon descriptions are in soil areas using those reference names and legal descriptions. The locations have been checked by the party leader.

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

The citation in the box on the inside of the cover will read: "This survey was made cooperatively by the Soil Conservation Service and Purdue University Agricultural Experiment Station. It is part of the technical assistance furnished to the Kosciusko County Soil and Water Conservation District. Financial assistance was made available by Kosciusko County and the State of Indiana."

Disposition of Original Atlas Field Sheets:

The original atlas field sheets (halftone positives) for Kosciusko County will be retained by the Indiana State Office 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 March 1986.

Prior Soil Survey Publications:

A reference to the 1927 soils survey of Kosciusko County, Indiana, will be made in the introduction of this publication. An example of how this might be done is as follows:

"The first soil survey of Kosciusko County was made in 1927 (ref. citation). This survey updates the first survey and provides additional information and larger maps that show the soils in greater detail.

Soil survey of Kosciusko County, Indiana, W. E. Tharp, in charge, and Earl D. Fowler, of the U. S. Department of Agriculture, and L. S. Troth and H. R. Beyer, of the Purdue University Agricultural Experiment Station, and A. T. Wiancko and S. D. Conner, Department of Soils and Crops, Purdue University Agricultural Experiment Station, 54 pp., illus., 1927."

Instruction for Map Finishing:

The conventional and special symbols used in this survey are listed on the attached SCS-SOILS-37A. These are the only symbols that will be shown on the published maps. The maps will be finished using the "Guide for Soil Map Finishing," July 1976.

SOIL SURVEY KOSCIUSKO 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)

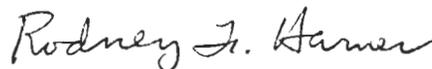
Map symbol	Soil name
ArA	:Aubbeenaubbee sandy loam, 0 to 2 percent slopes (where drained)
AtA	:Aubbeenaubbee sandy loam, moderately permable, 0 to 2 percent slopes (where drained)
Bc	:Barry loam (where drained)
BLA	:Blount silt loam, 0 to 2 percent slopes (where drained)
BnB	:Blount-Glynwood complex, 1 to 3 percent slopes (where drained)
Bp	:Brady sandy loam
BrA	:Bronson sandy loam, 0 to 2 percent slopes
CaA	:Carmi loam, 0 to 2 percent slopes
CrA	:Crosier loam, 0 to 1 percent slopes (where drained)
CrB	:Crosier loam, 1 to 4 percent slopes (where drained)
De	:Del Rey silt loam (where drained)
Gf	:Gilford sandy loam, gravelly substratum (where drained)
Gm	:Gilford mucky sandy loam, gravelly substratum (where drained)
Go	:Gravelton loamy sand, occasionally flooded (where drained)
GtA	:Griswold loam, 0 to 2 percent slopes
Ho	:Homer sandy loam (where drained)
KoA	:Kosciusko sandy loam, 0 to 2 percent slopes
KoB	:Kosciusko sandy loam, 2 to 6 percent slopes
KtA	:Kosciusko silt loam, 0 to 2 percent slopes
MaA	:Martinsville sandy loam, 0 to 2 percent slopes
MaB	:Martinsville sandy loam, 2 to 6 percent slopes
MbA	:Metea loamy sand, 0 to 2 percent slopes
MbB	:Metea loamy sand, 2 to 6 percent slopes
MeA	:Metea loamy fine sand, moderately slowly permeable, 0 to 2 percent slopes
MeB	:Metea loamy fine sand, moderately slowly permeable, 2 to 6 percent slopes
MLB	:Miami loam, 2 to 6 percent slopes
MsB	:Miami-Owosso-Metea complex, 2 to 8 percent slopes
MzB	:Morley-Glynwood complex, 1 to 4 percent slopes
Pe	:Pewamo silty clay loam (where drained)

SOIL SURVEY KOSCIUSKO COUNTY, INDIANA

PRIME FARMLAND--Continued

Map symbol	Soil name
Re	:Rensselaer loam (where drained)
RLA	:Riddles fine sandy loam, 0 to 2 percent slopes
RLB	:Riddles fine sandy loam, 2 to 6 percent slopes
RxB	:Riddles-Ormas-Kosciusko complex, 2 to 6 percent slopes
Sa	:Saranac clay loam, gravelly substratum, occasionally flooded (where drained)
Se	:Sebewa loam (where drained)
Sf	:Sebewa mucky loam (where drained)
Sn	:Shoals loam, gravelly substratum, occasionally flooded (where drained)
To	:Toledo silty clay (where drained)
Wc	:Washtenaw silt loam (where drained)
We	:Washtenaw loam, gravelly substratum (where drained)
WLB	:Wawasee fine sandy loam, 2 to 6 percent slopes
Wt	:Whitaker loam (where drained)

Approved: April 5, 1985



 RODNEY F. HARNER
 Head, Soils Staff
 Midwest NTC

CONVERSION LEGEND FOR
KOSCIUSKO COUNTY, INDIANA

Field symbol	Publi- cation symbol	Field symbol	Publi- cation symbol	Field symbol	Publi- cation symbol	Field symbol	Publi- cation symbol
Ab	Ab	Hj	He	Mx	To	SLF	Ud
Am	Pb	Hk	He	MxB3	MxC3	Sn	Sn
As4	ArA	Ho	Ho	MxC3	MxC3	So	Sa
At	AtA	Ht	Ht	MxD3	MxD3	St	Ab
BaA	BlA	Hx	Hx	Oe	Uf	Ud	Ud
BaB2	BnB	KoE	KoE	Of	Ao	VoA	CaA
BoA	BoB	Le	To	OsA	OrA	VoB	CaA
BoB	BoB	MaA	MaA	OsA4	OtA	Wa	Wa
BoB2	BoB	MaB	MaB	OsB	OrB	WgA	ShA
BoC	BoC	MaB2	MaB	OsB2	OrB	WgB	ShB
RoC2	BoC	MaC	MaC	OsB4	OtB	Wh	Wc
Bp	Bp	MaC2	MaC	OsB24	OtB	WhA	ShA
Bx	BrA	MgA	MeA	Osc	OrC	WhB	ShB
BxA	BrA	MgB	MeB	Osc2	OrC	Wj	Se
Bz	Bc	MgC	MeC	Osc4	OtC	Wk	Wt
ChA	CLB	MkB	WLB	Osc24	OtC	Wm	Wc
ChB	CLB	MkC	WLC2	Pm	Pa	Wo	We
ChB2	CLB	MkC2	WLC2	PoA	MbA	Wp	Se
ChC	CLC	MkD	WLD2	PoB	MbB	Wt	Wt
ChC2	CLC	MkD2	WLD2	PoC	MbC		
CrA	CrA	MmB	MLB	PrA	GtA		
CrB	CrB	MmB2	MLB	PrB	GtA		
De	De	MmC	MLC	Pt	Pg		
DeA	De	MmC2	MLC	Pw	Pe		
Ed	Ed	MmD	MrD3	Re	Re		
EhA	CaA	MmD2	MrD3	RsA	RLA		
FoA	KoA	MmE2	MrD3	RsB	RLB		
FoB	KoB	MmE3	MrD3	RsC	RLC		
FoC	KoC	MoC3	MrC3	RsD	RLD		
FoC2	KoC	MoD3	MrD3	RxB	RxB		
FoC3	KxC3	MoE3	MrD3	RxB2	RxB		
FoD3	KxC3	MpB	MsB	RxC	RxC		
FtA	KtA	MpB2	MsB	RxC2	RxC		
FxC3	KxC3	MpD	MsD	Sg	He		
FxD3	KxC3	MpD2	MsD	Se	Se		
Gf	Gf	Ms	To	Sf	Sf		
Gk	Go	MtB	MzB	Sh	Sn		
Gm	Gm	MtB2	MzB	ShA	ShA		
Gn	Gr	MtC	MvC	ShB	ShB		
Gp	Pg	MtC2	MvC	SL	Sa		

CLASSIFICATION OF PEDONS SAMPLED
FOR LABORATORY ANALYSIS

Data from Purdue Laboratory with SCS-SOILS-8 Forms

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Aubbeenaubbee	S77IN85-5-(1-5)	AtA	Aubbeenaubbee ^{1/}
Bloomfield	S77IN85-1-(1-7)	OrA	Taxadjunct to Bloomfield; coarse-loamy, mixed, mesic Psammentic Hapludalf; inclusion in a Ormas loamy sand map unit
Boyer	S78IN85-4-(1-6)	BoB	Taxadjunct to Boyer; fine- loamy, mixed, mesic Typic Hapludalfs
Brookston	S77IN85-4-(1-6)	Bc	Taxadjunct to Barry; fine- loamy, mixed, mesic Typic Haplaquolls ^{1/}
Chelsea	S77IN85-6-(1-6)	RxB	Coloma, slightly shallower to uppermost band than defined for series but deeper than maximum depth defined for Lakin series; inclusion in map unit of Riddles-Ormas-Kosciusko complex
Crosier	S74IN85-1-(1-4)	CrA	Crosier
Crosier	S74IN85-3-(1-5)	CrA	Aubbeenaubbee, inclusion in a Crosier loam map unit
Crosier	S74IN85-2-(1-5)	CrA	Conover, inclusion in a Crosier loam map unit
Del Rey	S78IN85-2-(1-6)	De	Del Rey--Minimal clay content ^{1/} for Del Rey series ^{1/}
Elston	S71IN43-2-(1-7)	CaA	Carmi--Carmi pedon marginal to fine-loamy over sandy or sandy skeletal textural family but the normal kinds or laboratory variation could result in a coarse- loamy classification

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Fox	S75IN85-1-(1-6)	KoB	Kosciusko (Taxadjunct)-- fine-loamy over sandy or sandy skeletal, mixed, mesic Mollic Hapludalfs
Fox	S75IN85-2-(1-6)	KoB	Taxadjunct to Kosciusko; fine-loamy over sandy or sandy skeletal, mixed, ^{1/} mesic Typic Hapludalfs ^{1/}
Fox	S75IN85-3-(1-5)	KoA	Taxadjunct to Kosciusko; fine-loamy over sandy or sandy skeletal, mixed, mesic Typic Hapludalfs
Fox	S75IN85-5-(1)	KoA	Kosciusko--sandy loam surface
Fox	S74IN85-16-(1)	KtA	Kosciusko--silt loam surface
Gilford	S81IN85-8-(1-8)	Gf	Gilford--slightly less clay in surface layer and more variable textures throughout, due to stratification, than ^{1/} typical for Gilford series ^{1/}
Lenawee Variant	S76IN85-3-(1-6)	Bc	Lenawee Variant--fine-loamy, mixed, mesic Mollic Ochraqualfs; inclusion in map unit of Barry loam
Wawasee	S76IN85-1-(1-5)	W1B	Wawasee ^{1/}
Miami	S74IN85-4-(1-2)	W1B	Wawasee
Miami	S81IN85-10-(1-7)	M1B	Miami--contains maximum amount of clay in the upper 20 inches of argillic horizon for Miami series ^{1/}
Morley	S78IN85-3-(1-4)	MtB	Morley ^{1/}
Ormas	S77IN85-2-(1-7)	OrA	Ormas--coarse sandy loam textures in the C horizon are not typical for the Ormas series
Oshtemo	S77IN85-3-(1-7)	OrA	Oshtemo--contains less gravel in the solum then defined for Oshtemo series; inclusion in map unit of Ormas

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Palms Variant	S78IN85-5-(1-8)	Pb	Palms, gravelly substatum
Polerun	S81IN85-1-(1-7)	MbB	Metea, slightly less clay in 2Bt than defined for series
Riddles	S72IN43-1-(1-6)	R1A	Riddles--contains more gravel in Bt than defined for Riddles series
Riddles	S72IN43-2-(1-6)	R1C	Hillsdale--inclusion in map unit of Riddles fine sandy loam
Riddles	S79IN85-1-(1-6)	R1B	Riddles
Riddles	S79IN85-2-(1-6)	R1B	Riddles--site has slightly less clay in upper 20 inches of argillic horizon than defined for Riddles series but the discrepancy is small enough to be within the range of laboratory error ^{1/}
Shipshe	S71IN43-1-(1-7)	ShA	Taxadjunct to Shipshe; coarse-loamy, mixed, mesic Typic Argiudolls
Shipshe	S76IN85-2-(1-6)	ShA	Shipshe--slightly less clay than defined range for the series ^{1/}
Sloan	S81IN85-5-(1-7)	Sa	Saranac ^{1/}
Toledo	S79IN85-3-(1-8)	To	Toledo--slightly less clay in 2c at depths of 58-70 inches than defined for Toledo series; control section contains too much clay for the Lenawee series which is nearest competitor
Toledo	S79IN85-4-(1-9)	To	Toledo ^{1/}
Wawasee	S78IN85-1-(1-5)	W1B	Taxadjunct to Wawasee; coarse-loamy, mixed, mesic Typic Hapludalfs

<u>Sampled as</u>	<u>Pedon Sample No.</u>	<u>Publication Symbol</u>	<u>Approved Series Name or Classification</u>
Glynwood	S81IN85-9-(1-7)	MtB	Glynwood ^{1/}
Shoals	S81IN85-6-(1-6)	Sn	Shoals--surface layer F 10 inches thick too dark for defined range of Shoals series but "Soil Taxonomy" does not separate a class ^{1/} of Aeric Mollic Fluvaquents ^{1/}
Washtenaw Variant	S81IN85-4-(1-8)	We	Washtenaw--clay content of control section less than defined range for Washtenaw
Abscota	S81IN85-7-(1-7)	Ab	Abscota ^{1/}
Gravelton	S81IN85-3-(1-9)	Go	Gravelton ^{1/}

Data from NSSL with SCS-SOILS-8 Forms

Wawasee	S83IN-085-001	W1B	Wawasee
---------	---------------	-----	---------

^{1/} Representative pedon for series in Kosciusko County.

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

by
Jerry D. Larson and Robert I. Turner

ABSCOTA SERIES

Abscota soils are in the least acid part of the range for the Abscota series and have slight effervesence starting at a depth of about 20 inches and strong effervesence starting at a depth of about 38 inches.

AUBBEENAUBBEE SERIES

Some of the Aubbeenaubbee soils formed in the same kind of material as the Wawasee soils, which have moderate permeability. Because of this the Aubbeenaubbee soils in map unit AtA are thought to have moderate permeability. Map unit AtA was added at the field correlation.

BARRY SERIES

Barry soils lack sufficient increase in clay content to qualify for an argillic horizon and for that reason, are taxajuncts to the Barry series. These soils classify as fine-loamy, mixed, mesic Typic Hapluquolls.

BLOUNT SERIES

After further examination of the descriptions and discussion of the situation, we removed eroded from the phase name of the Blount-Glenwood complex, 1 to 3 percent slopes as it failed the definition of eroded.

BOYER SERIES

Because of the lack of significant differences in the use, management, or productivity of the A and B slopes for the Boyer series, they were combined with a slope range of 0 to 6 percent.

CARMI SERIES

Carmi soils are in the least acid part of the range of the Carmi series. In addition, there are some pedons included in the map units which are marginal to the fine-loamy over sandy or sandy-skeletal family.

COLOMA SERIES

The depth to the uppermost lamella is less than 40 inches but is still deeper than defined for the closely competing Lakin series, which has its uppermost lamella between depths of 10 and 26 inches. In addition, Lakin soils are in an area that has a higher mean annual precipitation. We did not call Coloma soils taxadjuncts on this account. In addition, Coloma soils are slightly less acid than defined for the series.

CROSIER SERIES

The Crosier soils in this survey area are in the least sandy part of the range of sand content for the Crosier series.

DEL REY SERIES

Del Rey soils are in the least acid part of the range for the Del Rey series and in addition, have the minimal amount of clay as defined for that series.

GILFORD SERIES

Gilford soils have slightly less clay in the surface horizons and have more variable textures throughout than is considered typical for the Gilford series. Gilford mucky sandy loam is mostly in slightly lower positions in somewhat concave depressions, and have a greater wetness hazard than Gilford sandy loam.

GRAVELTON SERIES

This series is established in this correlation. Gravelton soils are similar to the Craigmile series except they have gravelly coarse sand or gravelly loamy coarse sand 2C horizons with their upper boundary between depths of 16 and 40 inches. In many respects, they have some similarities to the gravelly substratum phases of the Gilford series, except those phases do not flood and have the gravelly textures below depths of 40 inches.

KOSCIUSKO SERIES

Kosciusko soils are taxadjuncts to the Kosciusko series because they have contrasting textures in the control section. They classify as fine-loamy over sandy or sandy-skeletal, mixed, mesic Typic Hapludalfs. These soils contain more fine and coarser sand than the similar Fox series, have more gravel in the solum, have a somewhat lower AWC, and are considered less productive than the Fox soils.

METEA SERIES

With the adoption of two permeability classes for the Metea series there is no need for the tentative Polerun series. It is correlated as a moderately permeable phase of the Metea series. We suggest that the clay range for the underlying glacial till in the Metea series be expanded to 20 to 35 percent. In Kosciusko County, Metea soils are in the least acid part of the range for the Metea series and have the maximum depth to the top of the Bt horizon as defined for the Metea series.

MIAMI SERIES

Miami soils are in the least acid part of the range for the Miami series.

MORLEY SERIES

Morley soils have gray mottles at rather shallow depths for designation as a well drained soil. However, the presence of the gray mottles coincides with the depth to the C horizon of highly calcareous glacial till, and we believe the gray mottles are more a function of the carbonates and the historical colors of the glacial till than they are to drainage.

ORMAS SERIES

Ormas soils have slightly less acid Bt horizons than defined for the series. The proposed Epworth series is included with the Ormas series. The Epworth series was proposed during the field correlation for soils that contain gravel in the C horizon below a depth of 60 inches; however, on stream terraces and outwash plains there is no significant difference in potential as a source of gravel between the Ormas series and the proposed Epworth series. In the outwash areas in the uplands soils identified as the Epworth series lack a significant amount of gravel in the C horizon. These soils were correlated as Ormas loamy sand, sandy substratum.

OWOSSO SERIES

Soils identified as Rawson Variant are in the range of the Owosso series. For that reason they are changed to Owosso.

PALMS SERIES

Soils previously identified as map unit Am, Adrian Variant, and in map unit Gr, Gravelton-Adrian complex are in the range of Palms series. They are identified as Palms muck, gravelly substratum. The depth to the sandy and gravelly material is about 45 to 55 inches below the top of the organic material. Those pedons with the top of the sandy and gravelly material at depths of less than 51 inches have a very small part of the control section in the sandy material. This is of no significance to the use and management of this phase of the Palms series.

PEWAMO SERIES

Pewamo soils are in the least clayey part of the range for the Pewamo series.

RENSSELAER SERIES

Rensselaer soils have slightly more sand in the upper part of the Bt horizon and are in the least clayey part of the range for this series. In addition, they have a thinner Bt horizon than typical for the Rensselaer series.

RIDDLES SERIES

The upper 20 inches of the argillic horizon has slightly less clay than defined for the Riddles series.

SHIPSHE SERIES

Shipshe soils have slightly less clay than defined for the Shipshe series.

SHOALS SERIES

Shoals soils have surface horizons with slightly darker color value than is typical for the Shoals series.

SARANAC SERIES

Soils which were previously identified as the Sloan series have more clay in the control section than allowed in the Sloan series. These properties appear to be more similar to the Saranac series and we have renamed this map unit as Saranac.

TOLEDO SERIES

Toledo soils contain free carbonates at slightly shallower depths than defined for the Toledo series.

WALLKILL SERIES

Wallkill soils have somewhat more silt and less sand and clay than typical for the Wallkill series.

WASHTENAW SERIES

Soils previously identified as a Washtenaw Variant are changed to the Washtenaw series because the clay content is very close to that allowed in Washtenaw series. They are underlaid by gravelly material and for that reason are identified as a gravelly substratum phase of Washtenaw.

SOIL SURVEY KOSCIUSKO 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
Abscota-----	Mixed, mesic Typic Udipsamments
Aquents-----	Mixed, nonacid, mesic Aquents
Aquolls-----	Loamy, mixed mesic Haplaquolls
Aubbeenaubbee	Fine-loamy, mixed, mesic Aeric Ochraqualfs
*Barry-----	Fine-loamy, mixed, mesic Typic Argiaquolls
Blount-----	Fine, illitic, mesic Aeric Ochraqualfs
Boyer-----	Coarse-loamy, mixed, mesic Typic Hapludalfs
Brady-----	Coarse-loamy, mixed, mesic Aquollic Hapludalfs
Bronson-----	Coarse-loamy, mixed, mesic Aquic Hapludalfs
Carmi-----	Coarse-loamy, mixed, mesic Typic Hapludolls
Coloma-----	Mixed, mesic Alfic Udipsamments
Crosier-----	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Del Rey-----	Fine, illitic, mesic Aeric Ochraqualfs
Edwards-----	Marly, euic, mesic Limnic Medisaprists
Gilford-----	Coarse-loamy, mixed, mesic Typic Haplaquolls
Glywood-----	Fine, illitic, mesic Aquic Hapludalfs
Gravelton----	Sandy, mixed, mesic Fluvaquentic Haplaquolls
Griswold-----	Fine-loamy, mixed, mesic Typic Argiudolls
Histosols----	Euic, mesic Medisaprists
Homer-----	Fine-loamy over sandy or sandy-skeletal, mixed, : mesic Aeric Ochraqualfs
Houghton-----	Euic, mesic Typic Medisaprists
*Kosciusko----	Fine-loamy, mixed, mesic Typic Hapludalfs
Martinsville	Fine-loamy, mixed, mesic Typic Hapludalfs
Metea-----	Loamy, mixed, mesic Arenic Hapludalfs
Miami-----	Fine-loamy, mixed, mesic Typic Hapludalfs
Morley-----	Fine, illitic, mesic Typic Hapludalfs
Ormas-----	Loamy, mixed, mesic Arenic Hapludalfs
Owosso-----	Fine-loamy, mixed, mesic Typic Hapludalfs
Palms-----	Loamy, mixed, euic, mesic Terric Medisaprists
Pewamo-----	Fine, mixed, mesic Typic Argiaquolls
Rensselaer---	Fine-loamy, mixed, mesic Typic Argiaquolls
Riddles-----	Fine-loamy, mixed, mesic Typic Hapludalfs
Saranac-----	Fine, mixed, mesic Fluvaquentic Haplaquolls
Sebewa-----	Fine-loamy over sandy or sandy-skeletal, mixed, : mesic Typic Argiaquolls
Shipshe-----	Loamy-skeletal, mixed, mesic Typic Argiudolls

SOIL SURVEY KOSCIUSKO COUNTY, INDIANA

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
Shoals-----	Fine-loamy, mixed, nonacid, mesic Aeric Fluvaquents
Toledo-----	Fine, illitic, nonacid, mesic Mollic Haplaquepts
Udorthents---	Loamy, mixed, nonacid, mesic Udorthents
Wallkill-----	Fine-loamy, mixed, nonacid, mesic Thapto-Histic Fluvaquents
Washtenaw----	Fine-loamy, mixed, nonacid, mesic Aeric Fluvaquents
Wawasee-----	Fine-loamy, mixed, mesic Typic HapludalFs
Whitaker-----	Fine-loamy, mixed, mesic Aeric OchraqualFs