CLASSIFICATION AND CORRELATION

OF

THE SOILS OF

MIAMI COUNTY
INDIANA

AUGUST 1977

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 Miami County, Indiana

The classification and correlation of Miami County, Indiana was made at the Soil Correlation Unit, Midwest Technical Service Center, February 22-23, 1977. The descriptive legend, laboratory data, correlation samples, field notes, series descriptions and interpretation records were reviewed by DeWayne Williams, soil correlator, Jack M. Deal, party leader, and P. R. Johnson. P. R. Johnson also participated in the Comprehensive Field Review and Final Field Review.

Symbol	Field Name	Approved Name	Manuscript* Map Symbol
Au	Aubbeenaubbee sandy loam, 0-2% slopes	Aubbeenaubbee sandy loam, 0 to 2 percent slopes	Au
Ba	Blount loam, 1-3% slopes	Blount loam, 1 to 3 percent slopes	Ba
Bc	Blount silt loam, 0-2% slopes	Blount silt loam, 0 to 2 percent slopes	Bc
Br	Brookston loam	Brookston loam	Br
ChA	Chelsea fine sand, 0-6% slopes	Chelsea fine sand, 2 to 9 percent slopes	ChB
Cr	Crosier loam, 0-2% slopes	Crosier loam, 0 to 2 percent slopes	Cr
Fn	Fincastle silt loam, 0-2% slopes	Fincastle silt loam, 0 to 2 percent slopes	Fn
FsA	Fox silt loam, 0-2% slopes	Fox silt loam, 0 to 2 percent slopes	FsA

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

Symbol	Field Name	Approved Name	Manuscript Map Symbol
FsB	Fox silt loam, 2-6% slopes	Fox silt loam, 2 to 6 percent slopes	FsB
FzC3	Fox clay loam, 6-12% slopes, severely eroded	Fox clay loam, 8 to 15 percent slopes, severely eroded	FzC3
Ge	Genesee silt loam	Gessie silt loam	Ge
Gr	Gilford sandy loam	Gilford sandy loam	Gr
HeG	Hennepin silt loam, 25-50% slopes	Hennepin silt loam, 25 to 50 percent slopes	HeG
Hx	Houghton muck, drained	Houghton muck, drained	Hx
MaA	Martinsville sandy loam, 0-2% slopes	Martinsville sandy loam, 0 to 2 percent slopes	MaA
MeB	Metea loamy fine sand, 2-6% slopes	Metea loamy fine sand, 2 to 6 percent slopes	MeB
MhB2	Miami silt loam, 2-6% slopes, eroded	Miami silt loam, 2 to 6 percent slopes	MhB
MnC3	Miami clay loam, 6-12% slopes, severely eroded	Miami clay loam, 6 to 12 percent slopes, severely eroded	MhC3
MnD3	Miami clay loam, 12-18% slopes, severely eroded	Miami clay loam, 12 to 18 percent slopes, severely eroded	MhD3
Mo	Milford silty clay loam	Milford silty clay	Mk
Md	Millsdale silty clay loam	Millsdale silty clay loam	Mm
MqA	Milton silt loam, 0-2% slopes	Milton silt loam, 0 to 2 percent slopes	Mp
MrB	Morley sandy loam, 2-6% slopes	Morley sandy loam, 2 to 6 percent slopes	MrB

Symbol	Field Name	Approved Name	Manuscript Map Symbol
MsB2	Morley silt loam, 2-6% slopes, eroded	Morley silt loam, 2 to 6 percent slopes	MsB
MsC2	Morley silt loam, 6-12% slopes, eroded	Morley silt loam, 6 to 12 percent slopes	MsC
MsD2	Morley silt loam, 12-18% slopes, eroded	Morley silt loam, 12 to 18 percent slopes	MsD
MtC3	Morely silty clay loam, 6-12% slopes, severely eroded	Morley silty clay loam, 6 to 12 percent slopes, severely eroded	MtC3
MtD3	Morley silty clay loam, 12-18% slopes, severely eroded	Morley silty clay loam, 12 to 25 percent slopes, severely eroded	MtD3
OcA	Ockley silt loam, 0-2% slopes	Ockley silt loam, 0 to 2 percent slopes	OcA
OcB2	Ockley silt loam, 2-6% slopes, eroded	Ockley silt loam, 2 to 6 percent slopes	OcB
Or	Orthents loam	Orthents, loamy	Or
OsB2	Oshtemo loamy sand, 2-6% slopes, eroded	Ormas-Oshtemo loamy sands, 2 to 8 percent slopes	OsB
OtA	Oshtemo sandy loam, 0-2% slopes	Oshtemo sandy loam, 0 to 4 percent slopes	OtA
Pm	Palms muck, drained	Palms muck, drained	Pm
Pt	Patton silty clay loam	Patton silty clay loam	Pt
Pw	Pewamo silty clay loam	Pewamo silty clay loam	Pw
Pz	Pits, quarry, limestone	Pits, quarry, limestone	Pz
Re	Rensselaer loam	Rensselaer loam	Re
Gh	Genesee silt loam, fans	Ross loam	Ro

Symbol	Field Name	Approved Name	Manuscript Map Symbol
Se	Sebewa loam	Sebewa loam	Se
Sh	Shoals silt loam	Shoals silt loam	Sh
Sn	Sleeth loam	Sleeth loam	Sn
So	Sloan silty clay loam	Sloan silty clay loam	So
St	Stonelick sandy loam	Stonelick sandy loam	St
Bs	Brookston silty clay loam	Treaty silt loam	Tr
Wh	Washtenaw silt loam	Washtenaw silt loam	Wh
MfB2	Miami sandy loam, 2-6% slopes	Wawasee sandy loam, 2 to 6 percent slopes	WsB
MfC2	Miami sandy loam, 6-12% slopes	Wawasee sandy loam, 6 to 12 percent slopes	WsC
		Wawasee loam, 6 to 12 percent slopes, severely eroded	WsC3
		Wawasee loam, 12 to 18 percent slopes, severely eroded	WsD3

Series established by this correlation:

Gessie
Ormas
Treaty
Wawasee

Series dropped or made inactive:

None

Join statement:

The soil survey of Miami County joins the modern soil survey of Howard County, Indiana. The soil mapping unit delineations join except the Treaty map unit (Tr) joins the Brookston unit of Howard County. Treaty soils are fine-silty and Brookston soils are fine-loamy. The General Soil Map joins with that of Howard County as follows:

1. Fincastle-Treaty in Miami County joins Crosley-Brookston of Howard County. This area in Miami County has a thicker loess mantle than was recognized for the adjoining areas of Howard County. Interpretations for the soils are very similar.

2. The Genesee-Shoals and Miami-Russell-Morley units of Howard County were too small to delineate in Miami County.

3. The Blount-Pewamo units join.

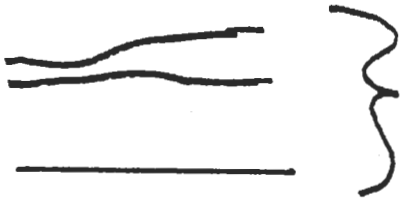
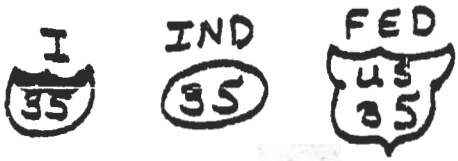
Disposition of field sheets:

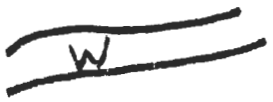
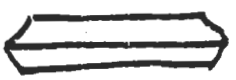
The field sheets have been retained by Indiana. The field sheets will be forwarded when needed, to the Lincoln Cartographic Unit for processing for overlays needed by Indiana for map finishing. The requirements of Soils Memorandum-8 have been complied with.

Cultural Symbols:

The cultural symbols to be retained for publication are those indicated on the following. All other cultural symbols on the field sheets will not be shown on the published maps.

SYMBOL LEGEND FOR CULTURAL FEATURES AND SPOT SYMBOLS
CONVENTIONAL AND AD HOC SYMBOLS

Description	Symbol	Disposition
HIGHWAYS AND ROADS		
Divided (wide or variable median)		For information only. Use SCS-37A.
Good motor		
INTERCHANGES		
Existing (to scale; per photo image)		Delete
ROUTE DESIGNATIONS		
Interstate, U.S., state		Retain
BUILDINGS AND SIMILAR FEATURES		
Church (to scale, if large)		Retain
School (to scale, if large)		Retain
BOUNDARIES		
County		Retain
Minor civil division		Use SCS-37A
National forest, state forest, large park or reservation		Retain
Small park, airfield		Retain
Cemetery		Retain
SECTION OR OTHER LAND SURVEY CORNERS		Retain

Description	Symbol	Disposition
DRAINAGE FEATURES		
Streams, double-line		Retain
Perennial		
Streams, single-line		
Perennial		Retain
Intermittent		
Crossable with tillage implements		Use SCS-37A
Not crossable with tillage implements		
Gully		Delete
Drainage end or alluvial fan		Retain
Lakes, ponds and reservoirs		
Perennial		Retain
Wet spot		Retain
Swamp, marsh		Retain
DAMS		
Very large (to scale)		Retain
Small; stock or farm pond		Retain
RELIEF FEATURES		
Other than bedrock		Retain, use SCS-37A
Short steep slope		Retain

Description	Symbol	Disposition
Gravel pit	GRAVEL PIT G.P.	Delete
Quarry, mine	QUARRY QU	Delete
Cut and fill land	CUT AND FILL LAND C.F.	Delete
SPECIAL SOIL SYMBOLS		
Blowout		Delete
Gravel spot, area		Retain
Outcrops		
Rock		Retain
Sand spot, area		Retain
Severely eroded spot		Retain
Stony, very stony		Delete
SOIL AREA BOUNDARIES AND SYMBOLS	EM WbM2 SfB	Retain
SUGGESTED AD HOC SYMBOLS (define if used)		
SOMEWHAT POORLY DRAINED SPOT		Delete

Approved: August 31, 1977

Maurice Stout, Jr.
Head, Soil Correlation Staff
Midwest TSC

CONVERSION LEGEND RELATING FIELD SYMBOLS
TO PUBLICATION SYMBOLS

Field Symbol	Publication Symbol	Field Symbol	Publication Symbol
As	Au	MhC2 5/	MhC3
Au	Au	MhC2 6/	WsC3
Ba 1/	Ba	MhD2 7/	MhD3
Ba 2/	Bc	MhD2 8/	WsD3
Br	Br	MnC3 9/	MhC3
Bs	Tr	MnC3 10/	WsC3
Bz	Br	MnD3 11/	MhD3
C.F.	Or	MnD3 12/	WsD3
ChA	ChB	Mo	Mk
ChB2	ChB	MoB	MhB
ChC	ChB	MoC	MhC3
Cr	Cr	MoD	MhD3
Ed	Hx	MqA	Mp
FcC	FzC3	MrA	Mp
Fn	Fn	MrB	MrB
FoA	OtA	MrB2	Mp
FoB	OtA	MrC3	MtC3
FoC2	OtA	MrD3	MtD3
FoD	FzC3	MrE3	MtD3
FsA	FsA	MsB	WsB
FsB	FsB	MsB2	MsB
FzC3	FzC3	MsC	WsC
FzD3	FzC3	MsC2	MsC
Ge	Ge	MsD2	MsD
Gh	Ro	MtA	Mp
G.P.	Or	MtB	Mp
Gr	Gr	MtC3	MtC3
Gs	St	MtD3	MtD3
HeG	HeG	MtE3	MtD3
Hx	Hx	MzB	MsB
Ma	Mm	MzC	MsC
MaA	MaA	MzD	MsD
McC	MhC3	OcA	OcA
McD	MhD3	OcB2	OcB
Md	Mm	Or	Or
MeA	MeB	OsA	OsB
MeB	MeB	OsB2	OsB
MeC	MeB	OsC	OsB
MfB2	WsB	OsC2	OsB
MfC2	WsC	OtA	OtA
MhB2 3/	MhB	OtB	OtA
MhB2 4/	WsB	OtC	OtA
MHC	MtC3	Pm	Pm
MHD	MtD3	Pt	Pt
MHE	MtD3	Pw	Pw
		Pz	Pz
		Ra	Mm

Field Symbol	Publication Symbol
RcB	MrB
Rd	Mm
Re	Re
Se	Se
Sh	Sh
Sl	Sn
Sn	Sn
So	So
St	St
Wa	Hx
Wh	Wh
Ws	Re

1/ Field symbol Ba north of the Eel River should be compiled as Ba

2/ Field symbol Ba south of the Eel River should be compiled as Bc

3/ Field symbol MhB2 south of the Eel River should be compiled as MhB

4/ Field symbol MhB2 north of the Eel River should be compiled as WsB

5/ Field symbol MhC2 south of the Eel River should be compiled as MhC3

6/ Field symbol MhC2 north of the Eel River should be compiled as WsC3

7/ Field symbol MhD2 south of the Eel River snould be compiled as MhD3

8/ Field symbol MhD2 north of the Eel River should be compiled as WsD3

9/ Field symbol MnC3 south of the Eel River should be compiled as MhC3

10/ Field symbol MnC3 north of the Eel River should be compiled as WsC3

11/ Field symbol MnD3 south of the Eel River should be compiled as MhD3

12/ Field symbol MnD3 north of the Eel River should be compiled as WsD3

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

Purdue Soils Laboratory

Sampled As:	Sample No.:	Lab. No.:	Approved:
Blount	S72-IN-52-1-(1-5)	133-137	Blount
Milford	S71-IN-65-1-(1-5)	149-153	Milford
Miami	S76-IN-108-1-(1-5)	M17601	Wawasee
Miami	S76-IN-108-2-(1-6)		Wawasee

Notes to Accompany
Classification and Correlation
of the Soils of
Miami County, Indiana
by
Paul R. Johnson

GESSIE SERIES
This series was proposed and established in this county for fine-loamy, mixed (calcareous), mesic Typic Udifluvents formed in loamy alluvium. This series is calcareous to the surface. 7240 acres are correlated in this county and it occurs in adjoining counties.

ORTHENTS
About 1000 acres are correlated as Orthents, loamy. These are areas that have been disturbed such as borrow areas and gravel pits. Areas of gravel pits are revegetating within a few years after the sites are abandoned and did not fit the requirements of a miscellaneous area.

ORMAS SERIES
This series was proposed and established in this county for loamy, mixed, mesic Arenic Hapludalfs that occur in complex with Oshtemo soils in mapping unit OsB. This complex is about 50 percent Ormas soils and 30 percent Oshtemo soils. About 1,000 acres occur in Miami County and over 2,000 acres have been mapped in Kosciusko.

ROSS SERIES
The Ross soils are taxadjunct to the Ross series as they have a mollic epipedon less than 24 inches thick and lack the B horizon of the Ross series. 940 acres are correlated.

TREATY SERIES
This series was proposed and established in this county for poorly drained fine-silty, mixed, mesic Typic Argiaquolls. This soil was previously called Brookston in the legend but transects indicated that the silt mantle was dominantly 24 to 40 inches thick over glacial till. The Treaty series has its type location in Wabash County which joins Miami County on the east.

WAWASEE SERIES
The Wawasee series was proposed and established for well-drained fine-loamy, mixed, mesic Typic Hapludalfs in areas north of the Eel River. These soils were previously called Miami sandy loam. Laboratory data indicated that these soils do not have the clay content in the argillic horizon of the Miami series. In addition, the underlying till is more friable and more permeable than underlying till of Miami. Mapping units WsC3 and WsD3 were added to the legend for severely eroded units of this soil that occur north of the Eel River. The Miami series occurs only in areas south of the Eel River.

CLASSIFICATION OF SOILS

Soil Series	Classification
Aubbeenaubbee	Aeric Ochraqulfs; fine-loamy, mixed, mesic
Blount	Aeric Ochraqualfs; fine, illitic, mesic
Brookston	Typic Argiaquolls; fine-loamy, mixed, mesic
Chelsea	Alfic Udipsamments; mixed, mesic
Crosier	Aeric Ochraqualfs; fine-loamy, mixed, mesic
Fincastle	Aeric Ochraqualfs; fine-silty, mixed, mesic
Fox	Typic Hapludalfs; fine-loamy over sandy or sandy-skeletal, mixed, mesic
Gessie	Typic Udifluvents; fine-loamy, mixed (calcareous), mesic
Gilford	Typic Haplaquolls; coarse-loamy, mixed, mesic
Hennepin	Typic Eutrochrepts; fine-loamy, mixed, mesic
Houghton	Typic Medisaprists; euic, mesic
Martinsville	Typic Hapludalfs; fine-loamy, mixed, mesic
Metea	Arenic Hapludalfs; loamy, mixed, mesic
Miami	Typic Hapludalfs; fine-loamy, mixed, mesic
Milford	Typic Haplaquolls; fine, mixed, mesic
Millsdale	Typic Argiaquolls; fine, mixed, mesic
Milton	Typic Hapludalfs; fine, mixed, mesic
Morley	Typic Hapludalfs; fine, illitic, mesic
Ockley	Typic Hapludalfs; fine-loamy, mixed, mesic
Ormas	Arenic Hapludalfs; loamy, mixed, mesic
Orthents	Typic Udorthents; loamy, mixed, mesic
Oshtemo	Typic Hapludalfs; coarse-loamy, mixed, mesic
Palms	Terric Medisaprists; loamy, mixed, euic, mesic

Soil Series	Classification
Patton	Typic Haplaquolls; fine-silty, mixed, mesic
Pewamo	Typic Argiaquolls; fine, mixed, mesic
Rensselaer	Typic Argiaquolls; fine-loamy, mixed, mesic
Ross*	Cumulic Hapludolls; fine-loamy, mixed, mesic
Sebewa	Typic Argiaquolls; fine-loamy over sandy or sandy-skeletal, mixed, mesic
Shoals	Aeric Fluvaquents; fine-loamy, mixed, nonacid, mesic
Sleeth	Aeric Ochraqualfs; fine-loamy, mixed, mesic
Sloan	Fluvaquentic Haplaquolls; fine-loamy, mixed, mesic
Stonelick	Typic Udifluvents; coarse-loamy, mixed (calcareous), mesic
Treaty	Typic Argiaquolls; fine-silty, mixed, mesic
Washtenaw	Typic Haplaquents; fine-loamy, mixed, nonacid, mesic
Wawasee	Typic Hapludalfs; fine-loamy, mixed, mesic

*Taxadjunct - See Notes to Accompany Classification and Correlation of the Soils of Miami County, Indiana.