

CLASSIFICATION AND CORRELATION
OF
THE SOILS OF

VERMILLION COUNTY
INDIANA

MARCH 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
Vermillion County, Indiana

The Classification and Correlation of the Soils of Vermillion County, Indiana, was held May 12-17, 1975, at Greencastle, Indiana, during the final field review for the survey area. The final field review report was submitted on February 4, 1976. Field sheets, manuscript, field notes, laboratory data, and applicable other documentation were reviewed at the time of the final field review. Documentation for mapping units not available for review at the time of the final field review were submitted in May 1976. Mac H. Robards, survey party leader; Travis Neely, party member; Richard A. Mack, District Conservationist; H. Raymond Sinclair, Jr., State Soil Scientist; Frank W. Sanders, Assistant State Soil Scientist; Leon B. Davis, Soil Specialist; Al L. Zachary, Purdue University; and Paul R. Johnson reviewed the material during the time of the final field review. Paul R. Johnson also participated in the comprehensive field review October 21-25, 1974.

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
AlB2	Alford silt loam, 2 to 6 percent slopes, eroded	AlB2	Alford silt loam, 2 to 6 percent slopes, eroded
AlC2	Alford silt loam, 6 to 12 percent slopes, eroded	AlC2	Alford silt loam, 6 to 12 percent slopes, eroded
Ar	Armiesburg silty clay loam	Ar	Armiesburg silty clay loam
DaB, DaB, DaB2	Dana silt loam, 1 to 4 percent slopes	DaB	Dana silt loam, 1 to 4 percent slopes
Dm	Mine dumps	Dm	Dumps, mine
Ee, Rs	Eel silt loam	Ee	Eel silt loam
EoA	Elston sandy loam, 0 to 2 percent slopes	EoA	Elston sandy loam, 0 to 2 percent slopes
EoB	Elston sandy loam, 2 to 6 percent slopes	EoB	Elston sandy loam, 2 to 6 percent slopes
FcA	Fincastle silt loam, 0 to 2 percent slopes	FcA	Fincastle silt loam, 0 to 2 percent slopes
FgA	Flanagan silt loam, 0 to 2 percent slopes	FgA	Flanagan silt loam, 0 to 2 percent slopes
FoB2	Fox sandy loam, 2 to 6 percent slopes, eroded	FoB2	Fox sandy loam, 2 to 6 percent slopes, eroded
FoC2	Fox sandy loam, 6 to 12 percent slopes, eroded	FoC2	Fox sandy loam, 6 to 12 percent slopes, eroded
FsA, FoA	Fox loam, 0 to 2 percent slopes	FsA	Fox loam, 0 to 2 percent slopes
FxC3	Fox clay loam, 6 to 12 percent slopes, severely eroded	FxC3	Fox clay loam, 6 to 12 percent slopes, severely eroded

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
Ge	Genesee silt loam	Ge	Genesee silt loam
GpG	Gosport shaly silt loam, 50 to 70 percent slopes	GpG	Gosport shaly silt loam, 50 to 70 percent slopes
HeF	Hennepin loam, 25 to 50 percent slopes	HeF	Hennepin loam, 25 to 50 percent slopes
HgB2, HgA, HgB2	High Gap silt loam, 2 to 6 percent slopes, eroded	HgB	High Gap silt loam, 2 to 6 percent slopes
IpA, MuA	Ipava silt loam, 0 to 2 percent slopes	IpA	Ipava silt loam, 0 to 2 percent slopes
MCA	Martinsville loam, 0 to 2 percent slopes	MCA	Martinsville loam, 0 to 2 percent slopes
McB2	Martinsville loam, 2 to 6 percent slopes, eroded	McB2	Martinsville loam, 2 to 6 percent slopes, eroded
MeD2	Miami silt loam, 12 to 18 percent slopes, eroded	MeD2	Miami silt loam, 12 to 18 percent slopes, eroded
MSc3	Miami clay loam, 6 to 12 percent slopes, severely eroded	MSc3	Miami clay loam, 6 to 12 percent slopes, severely eroded
Msd3	Miami clay loam, 12 to 18 percent slopes, severely eroded	Msd3	Miami clay loam, 12 to 18 percent slopes, severely eroded
OcA	Ockley silt loam, 0 to 2 percent slopes	OcA	Ockley silt loam, 0 to 2 percent slopes
OcB2, OcC2	Ockley silt loam, 2 to 6 percent slopes, eroded	OcB	Ockley silt loam, 2 to 6 percent slopes
OrB	Orthents, loamy, 0 to 8 percent slopes	OrB	Orthents, loamy, 0 to 8 percent slopes

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
OrG	Orthents, loamy, 33 to 90 percent slopes	OrG	Orthents, loamy, 33 to 90 percent slopes
Pa, Mt	Palms muck	Pa	Palms muck
Gp	Gravel pits	Pg	Pits, gravel
PlA, PaA	Plano silt loam, 0 to 2 percent slopes	PlA	Plano silt loam, 0 to 2 percent slopes
PrC, PrC2, PrD2	Princeton fine sandy loam, 8 to 15 percent slopes	PrC	Princeton fine sandy loam, 8 to 15 percent slopes
PtA	Proctor silt loam, 0 to 2 percent slopes	PtA	Proctor silt loam, 0 to 2 percent slopes
PtB2	Proctor silt loam, 2 to 6 percent slopes, eroded	PtB	Proctor silt loam, 2 to 6 percent slopes
Ra	Ragsdale silt loam	Ra	Ragsdale silt loam
RbA	Raub silt loam, 0 to 2 percent slopes	RbA	Raub silt loam, 0 to 2 percent slopes
ReA	Reesville silt loam, 0 to 2 percent slopes	ReA	Reesville silt loam, 0 to 2 percent slopes
RoF	Rodman gravelly loam, 25 to 50 percent slopes	RoF	Rodman gravelly loam, 25 to 50 percent slopes
RtA	Rush silt loam, 0 to 2 percent slopes	RtA	Rush silt loam, 0 to 2 percent slopes
RtB2	Rush silt loam, 2 to 6 percent slopes, eroded	RtB2	Rush silt loam, 2 to 6 percent slopes, eroded
RuB2	Russell silt loam, 2 to 6 percent slopes, eroded	RuB2	Russell silt loam, 2 to 6 percent slopes, eroded

Field symbols	Field mapping unit name	Publi- cation symbol	Approved mapping unit name
RuC2	Russell silt loam, 6 to 12 percent slopes, eroded	RuC2	Russell silt loam, 6 to 12 percent slopes, eroded
Sa	Sable silty clay loam	Sa	Sable silty clay loam
Dr	Drummer silty clay loam	Sb	Sable silty clay loam, loamy till substratum
SeA	Shadeland silt loam, 0 to 2 percent slopes	SeA	Shadeland silt loam, 0 to 2 percent slopes
SgA, WbA, WcA	Shipshe loam, 0 to 2 percent slopes	SgA	Shipshe loam, 0 to 2 percent slopes
SgB, WbB	Shipshe loam, 2 to 6 percent slopes	SgB	Shipshe loam, 2 to 6 percent slopes
Sh	Shoals silt loam	Sh	Shoals silt loam
Sm	Sleeth silt loam	Sm	Sleeth silt loam
Sn	Sloan loam	Sn	Sloan loam
So	Starks silt loam	So	Starks silt loam
Sp	Stonelick sandy loam	Sp	Stonelick sandy loam
TaB, TaB2	Tama silt loam, 2 to 6 percent slopes	TaB	Tama silt loam, 2 to 6 percent slopes
WeA, WeB2	Wea silt loam, 0 to 2 percent slopes	WeA	Wea silt loam, 0 to 2 percent slopes
Wt	Westland silty clay loam	Wt	Westland silty clay loam
Wx	Whitaker silt loam	Wx	Whitaker silt loam
XeB, XeA, XeB2	Xenia silt loam, 1 to 4 percent slopes	XeB	Xenia silt loam, 1 to 4 percent slopes

Series established by this correlation:

Shipshe

Series dropped or made inactive:

None

Join Statement:

Vermillion County joins with Vigo County, Indiana. A join statement is included in the final field review report.

Instructions for Map Finishing:

Symbols to be used are those indicated on the SCS-Soils-37A.

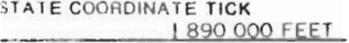
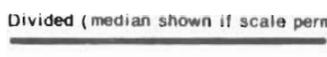
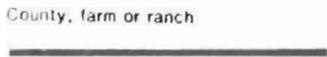
CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

SCS-SOILS-37A
3-75

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Soil Survey Area: Vermillion County
State: Indiana

Date: 2/4/77

DESCRIPTION	SYMBOL
CULTURAL FEATURES	
BOUNDARIES	
National, state, or province	
County or parish	
Land grant	
Limit of soil survey (label)	
Field sheet matchline & neatline	
AD HOC BOUNDARY (label)	
Small water pond, pond, lake, pasture, cemetery, wood-pool	
STATE COORDINATE TICK 1 890 000 FEET	
LAND DIVISION CORNERS (sections and land grants)	
ROADS	
Divided (median shown if scale permits)	
County, farm or ranch	
ROAD EMBLEMS & DESIGNATIONS	
Interstate	
Federal	
State	
Other	
RAILROAD	

DESCRIPTION	SYMBOL
CULTURAL FEATURES (cont.)	
LEVEES	
Without road	
With railroad	
DAMS	
Medium or small	
PITS	
Gravel pit	
MISCELLANEOUS CULTURAL FEATURES	
Farmstead, house (omit in urban areas)	
Church	
School	
Indian mound (label)	
WATER FEATURES	
DRAINAGE	
Perennial, double line	
Perennial, single line	
Intermittent	
Drainage end	
Canals or ditches	
Drainage and/or irrigation	

DESCRIPTION	SYMBOL
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LAKES, PONDS AND RESERVOIRS

Perennial



MISCELLANEOUS WATER FEATURES

Wet spot



SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SOIL SYMBOLS

ESCARPMENTS



Bedrock (points down slope)



Other than bedrock (points down slope)



SHORT STEEP SLOPE



GULLY



MISCELLANEOUS

Gravelly spot



Dumps and other similar non soil areas



Rock outcrop (includes sandstone and shale)



Sandy spot



Severely eroded spot



RECOMMENDED AD HOC SOIL SYMBOLS



Approved: March 10, 1977

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

CONVERSION LEGEND RELATING FIELD MAP SYMBOLS
TO PUBLICATION SYMBOLS

Field symbol	Publi- cation symbol						
AlB2	AlB2	OcC2	OcB	WeB2	WeA		
AlC2	AlC2	OrB	OrB	Wt	Wt		
Ar	Ar	OrG	OrG	Wx	Wx		
DaB	DaB	Pa	Pa	XeA	XeB		
DaB	DaB	PaA	PlA	XeB	XeB		
DaB2	DaB	PlA	PlA	XeB2	XeB		
Dm	Dm	PrC	PrC				
Dr	Sb	PrC2	PrC				
Ee	Ee	PrD2	PrC				
EoA	EoA	PtA	PtA				
EoB	EoB	PtB2	PtB				
FcA	FcA	Ra	Ra				
FgA	FgA	RbA	RbA				
FoA	FsA	ReA	ReA				
FoB2	FoB2	RoF	RoF				
FoC2	FoC2	Rs	Ee				
FsA	FsA	RtA	RtA				
FxC3	FxC3	RtB2	RtB2				
Ge	Ge	RuB2	RuB2				
Gp	Pg	RuC2	RuC2				
GpG	GpG	Sa	Sa				
HeF	HeF	SeA	SeA				
HgA	HgB	SgA	SgA				
HgB2	HgB	SgB	SgB				
HgB2	HgB	Sh	Sh				
IpA	IpA	Sm	Sm				
MCA	MCA	Sn	Sn				
McB2	McB2	So	So				
MeD2	MeD2	Sp	Sp				
Msc3	Msc3	TaB	TaB				
MsD3	MsD3	TaB2	TaB				
Mt	Ea	WbA	SgA				
MuA	IpA	WbB	SgB				
OcA	OcA	WcA	SgA				
OcB2	OcB	WeA	WeA				

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

Soil Pedons Characterized at Purdue Soils Laboratory

<u>Sampled As</u>	<u>Survey Number</u>	<u>Lab Number</u>	<u>Series Classified</u>	<u>Series Correlated</u>
Flanagan	S72IN83-4-(1-84)	189-196	Ipava	Ipava
Flanagan	S72IN83-3-(1-84)	181-188	Ipava	Ipava

Soil Pedons Characterized by Indiana State Highway Commission
Research and Training Center

<u>Sampled As</u>	<u>Survey Number</u>	<u>Lab Number</u>	<u>Series Classified</u>	<u>Series Correlated</u>
Shipshe	S73IN-83-1(1, 4, 7*)	BPR73IN83-1-(1-3*)	Shipshe	Shipshe
Shipshe	S73IN-83-2-(1, 4, 7*)	LPR73IN83-2-(1-3*)	Shipshe	Shipshe
Flanagan	S73IN-83-3-(1, 4, 8*)	BPR73IN83-3(1-3*)	Ipava	Ipava
Flanagan	S73IN-83-4-(1, 5, 8*)	BPR73IN83-4-(1-3*)	Ipava	Ipava

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

by
Paul R. Johnson

DANA SERIES

The Dana series was established in Vermillion County in 1930.

DUMPS, MINE

Mine dumps were delineated on the field sheets and labeled MINE DUMP or M.D. These delineations were renamed and given a publication symbol.

ORTHENTS

Two mapping units of Orthents, loamy, are recognized. Mapping unit OrB includes strip mines that have been leveled and Cut and fill land, Borrow pits and Made land that were delineated and labeled on the field sheets. Mapping unit OrG are areas of strip mining that were stripped before leveling was required by state law.

RAUB SERIES

The Raub series has its type location in Vermillion County.

SABLE SERIES

Two mapping units of Sable are recognized in the county. Mapping unit Sa has developed in more than 60 inches of loess; and mapping unit Sb has developed in more than 40 inches of loess, but has loamy glacial till within 60 inches.

CLASSIFICATION OF SOILS

<u>Soil Series</u>	<u>Classification</u>
Alford	Typic HapludalFs; fine-silty, mixed, mesic
Armiesburg	Fluventic Hapludolls; fine-silty, mixed, mesic
Dana	Typic Argiudolls; fine-silty, mixed, mesic
Eel	Aquic Udifluvents; fine-loamy, mixed, nonacid, mesic
Elston	Typic Argiudolls; coarse-loamy, mixed, mesic
Fincastle	Aeric OchraqualFs; fine-silty, mixed, mesic
Flanagan	Aquic Argiudolls; fine, montmorillonitic, mesic
Fox	Typic HapludalFs; fine-loamy over sandy or sandy-skeletal, mixed, mesic
Genesee	Typic Udifluvents; fine-loamy, mixed, nonacid, mesic
Gosport	Typic Dystrochrepts; fine, illitic, mesic
Hennepin	Typic Eutrochrepts; fine-loamy, mixed, mesic
High Gap	Typic HapludalFs; fine-loamy, mixed, mesic
Ipava	Aquic Argiudolls; fine, montmorillonitic, mesic
Martinsville	Typic HapludalFs; fine-loamy, mixed, mesic
Miami	Typic HapludalFs; fine-loamy, mixed, mesic
Ockley	Typic HapludalFs; fine-loamy, mixed, mesic
Orthents	Udorthents; loamy, mixed, mesic
Palms	Terric Medisaprists; loamy, mixed, euic, mesic
Plano	Typic Argiudolls; fine-silty, mixed, mesic
Princeton	Typic HapludalFs; fine-loamy, mixed, mesic
Proctor	Typic Argiudolls; fine-silty, mixed, mesic
Ragsdale	Typic Argiaquolls; fine-silty, mixed, mesic
Raub	Aquic Argiudolls; fine-silty, mixed, mesic

<u>Soil Series</u>	<u>Classification</u>
Reesville	Aeric Ochraqualfs; fine-silty, mixed, mesic
Rodman	Typic Hapludolls; sandy-skeletal, mixed, mesic
Rush	Typic Hapludalfs; fine-silty, mixed, mesic
Russell	Typic Hapludalfs; fine-silty, mixed, mesic
Sable	Typic Haplaquolls; fine-silty, mixed, mesic
Shadeland	Aeric Ochraqualfs; fine-loamy, mixed, mesic
Shipshe	Typic Argiudolls; loamy-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
Starks	Aeric Ochraqualfs; fine-silty, mixed, mesic
Stonelick	Typic Udifluvents; coarse-loamy, mixed (calcareous), mesic
Tama	Typic Argiudolls; fine-silty, mixed, mesic
Wea	Typic Argiudolls; fine-loamy, mixed, mesic
Westland	Typic Argiaquolls; fine-loamy, mixed, mesic
Whitaker	Aeric Ochraqualfs; fine-loamy, mixed, mesic
Xenia	Aquic Hapludalfs; fine-silty, mixed, mesic