SOIL
CLASSIFICATION AND CORRELATION
FOR
NEWTON COUNTY
INDIANA

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Indianapolis, Indiana

APRIL 1990

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
6013 Lakeside Boulevard
Indianapolis, Indiana 46278

Classification and Correlation of the Soils of Newton County, Indiana

April 1990

This correlation was prepared in April 1990 by Bill Hosteter, Soil Specialist, Soil Conservation Service, in Indianapolis, Indiana. The correlation is based on the draft soil survey manuscript, field notes, SOI-6 file, laboratory data, correlation samples, site visits, and field map sheets. James R. Barnes, Soil Survey Party Leader, participated in the Final Field Review. Robert I. Turner, Soil Correlator, MNTC, participated in the Comprehensive Field Review in July 1986.

Headnote for the 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 lower-case 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 and a number 3 indicates that the soil is severely eroded.

SOIL CORRELATION OF
NEWTON COUNTY, INDIANA

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
Ac, AcC, An1	Ackerman-Martisco Variant complex, drained	Ac	Ackerman-Martisco Variant complex, drained
An	Adrian muck, drained	Ad	Adrian muck, drained
AcS, Gt2	Adrian Variant muck	Af	Adrian Variant muck, drained
Ap, Ap1	Algansee loamy sand, frequently flooded, undrained	Ap	Algansee loamy sand, frequently flooded, undrained
Aq, Marsh	Aquolls, ponded	Ar	Aquolls, ponded
CyA, HdA, Wk, Wn, CpA, CyB, CyB2	Aubbeenaubbee-Whitaker complex, 0 to 2 percent slopes	AuA	Aubbeenaubbee-Whitaker complex, 0 to 2 percent slopes
AyB	Ayr loamy sand, 1 to 4 percent slopes	AyB	Ayr loamy fine sand, 1 to 4 percent slopes
AyA, 2FtA, 3FtA	Ayr Variant loamy sand, 0 to 2 percent slopes	AzA	Ayrmount loamy fine sand, 0 to 2 percent slopes
BfA, MtA, OcA, PdA, SyA, SyA2, CS	Corwin silt loam, 0 to 2 percent slopes	BbA	Barce-Corwin complex, 0 to 2 percent slopes
BfB2, McB2, PdB, SyB2, SyC2, BfC2	Barce loam, 1 to 4 percent slopes, eroded	BfB2	Barce-Montmorenci complex, 1 to 4 percent slopes, eroded
2Rs, Br, Gft, Rs2, Wo, Mf, Wd	Barry-Gilford fine sandy loams	Bh	Barry-Gilford complex
BeB, BeA, Be2	Brems loamy sand, 1 to 3 percent slopes	BmB	Brems loamy sand, 1 to 3 percent slopes
By, Mp	Bryce silty clay	By	Bryce silty clay loam

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
Co, Sn, Sp	Comfrey loam, frequently flooded	Co	Comfrey loam, frequently flooded, undrained
Cr	Conrad loamy fine sand	Cr	Conrad loamy fine sand
CtA, CoA	Corwin loam, 0 to 2 percent slopes	CtA	Corwin fine sandy loam, 0 to 2 percent slopes
CtB2, CtB	Corwin loam, 2 to 6 percent slopes, eroded	CtB2	Corwin fine sandy loam, 2 to 6 percent slopes, eroded
Cv, Sx	Craigmile loamy sand, frequently flooded, drained	Cv	Craigmile sandy loam, frequently flooded
Ca, SxA, CvA	Craigmile silt loam, frequently flooded, undrained	Cz	Craigmile mucky silt loam, frequently flooded, undrained
Df	Darroch fine sandy loam	DaA	Darroch fine sandy loam, 0 to 2 percent slopes
Dc, Dd	Darroch silt loam	DcA	Darroch silt loam, 0 to 2 percent slopes
2MfA, MfA, Cw	Matherton fine sandy loam, 0 to 2 percent slopes	DdA	Darroch fine sandy loam, sandy substratum, 0 to 2 percent slopes
Dg, 2Dc	Darroch loam, till substratum	DgA	Darroch loam, till substratum, 0 to 2 percent slopes
2AyA, 2AyB, BgA, Pg	Ayr Variant fine sandy loam, 1 to 3 percent slopes	EsB	Elston Variant fine sandy loam, 1 to 3 percent slopes
FpA	Foresman fine sandy loam, 0 to 2 percent slopes	FeA	Foresman fine sandy loam, 0 to 2 percent slopes

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
FoA, Fo	Foresman silt loam, 0 to 2 percent slopes	FoA	Foresman silt loam, 0 to 2 percent slopes
FoB2, FoB, FsB, 3FoB2, FoC, FoC2	Foresman silt loam, 2 to 6 percent slopes, eroded	FoB2	Foresman silt loam, 2 to 6 percent slopes, eroded
FuA	Foresman fine sandy loam, till substratum, 0 to 2 percent slopes	FrA	Foresman fine sandy loam, till substratum, 0 to 2 percent slopes
FuB2, JtB2, JtC2, 2FtB2, 3FtB2, 3FoB	Foresman fine sandy loam, till substratum, 2 to 6 percent slopes, eroded	FrB2	Foresman fine sandy loam, till substratum, 2 to 6 percent slopes, eroded
FtA, JaA, JaA2, JtA, JtA2	Foresman silt loam, till substratum, 0 to 2 percent slopes	FtA	Foresman silt loam, till substratum, 2 to 6 percent slopes, eroded
FtB2, FtB, JaB2, JtB, FsB2, 2FtB	Foresman silt loam, till substratum, 2 to 6 percent slopes, eroded	FtB2	Foresman silt loam, till substratum, 2 to 6 percent slopes, eroded
FsA	Foresman silt loam, clayey substratum, 0 to 2 percent slopes	FwA	Foresman silt loam, moderately fine substratum, 0 to 2 percent slopes
GbA, AtA, OeA	Gilboa silt loam, 0 to 2 percent slopes	GbA	Gilboa-Odell complex, 0 to 2 percent slopes
Gf, Gf1, Gg	Gilford fine sandy loam	Gf	Gilford fine sandy loam
WhA, WhB, WhB2, FxB, BmA, Sc, 2Sc, ScA, 2ScA, ScB, 2ScB, TbA, TbB	Wea silt loam, 0 to 2 percent slopes	GhB	Glenhall loam, 1 to 4 percent slopes

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
Gt1	Granby mucky loamy fine sand	Gn	Granby mucky loamy fine sand
Gt, Wx, Mh	Granby loamy fine sand	Gt	Granby loamy fine sand
Hb, Ho	Houghton muck, drained	Ho	Houghton muck, drained
Ir	Iroquois sandy loam	Ir	Iroquois fine sandy loam
Wx1, Cr1, Ke	Wooten mucky fine sand	Ke	Kentland mucky fine sand
MeA, MmA, MnA, WpA	Martinsville loam, 0 to 2 percent slopes	MeA	Martinsville-Williamstown complex, 0 to 2 percent slopes
MeB2, MeB, MeC2, MmB, MnB2, MoB3, WpB, WpB2	Martinsville loam, 2 to 6 percent slopes, eroded	MeB2	Martinsville-Williamstown complex, 2 to 6 percent slopes, eroded
4Mh, HmH	Maumee loamy fine sand	Mh	Maumee loamy fine sand
Mh1, Mh2, MhM	Maumee mucky loamy sand	Mk	Maumee mucky loamy fine sand
MnC2, MmC2, MoC2, MnC3, FtC3, HhC2	Miami loam, 6 to 12 percent slopes, eroded	MnC2	Miami loam, 6 to 12 percent slopes, eroded
MnD2, MeE2, MoE2, MnE2, BfD3, JtD2	Miami loam, 12 to 18 percent slopes, eroded	MnE	Miami loam, 18 to 25 percent slopes
Bd	Montgomery silty clay loam	Mp	Montgomery silty clay loam

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
MtB2, MxB, MtB, MtB3	Montmorenci loam, 2 to 6 percent slopes, eroded	MrB2	Montmorenci fine sandy loam, 2 to 6 percent slopes, eroded
Mu, Mr1, Mv, Mw	Morocco loamy sand	MuA	Morocco loamy sand
NsA, NeA	Nesius loamy sand, 0 to 2 percent slopes	NsA	Nesius loamy fine sand, 0 to 1 percent slopes
NsB, NsC, AdA, AdB	Nesius loamy sand, 1 to 4 percent slopes	NsB	Nesius loamy fine sand, 1 to 4 percent slopes
Nw, Ne	Newton sand, undrained	Nw	Newton loamy fine sand, undrained
OaB, ChB	Oakville fine sand, 2 to 6 percent slopes	OaB	Oakville fine sand, 2 to 6 percent slopes
OaC, OaC2, ChC	Oakville fine sand, 6 to 15 percent slopes	OaC	Oakville fine sand, 6 to 15 percent slopes
OaA, ChA	Oakville fine sand, wet substratum, 1 to 3 percent slopes	ObB	Oakville fine sand, moderately wet, 1 to 3 percent slopes
OcC2, MoC3, MtC3, OcC3, OcD2, PdC2, PdD2, AyD, OnC3, OnD3	Octagon silt loam, 6 to 12 percent slopes, eroded	OcC2	Octagon loam, 6 to 12 percent slopes, eroded
PdB2, OcB, AyC	Parr-Ayr complex, 2 to 6 percent slopes, eroded	OkB2	Octagon-Ayr complex, 2 to 6 percent slopes, eroded
OnA, AsA, BoA	Onarga loam, 0 to 2 percent slopes	OnA	Onarga fine sandy loam, moderately wet, 0 to 2 percent slopes

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
OnB2, AsB, BgB, OnB, OnC2, WhC, OnC	Onarga loam, 1 to 4 percent slopes, eroded	OnB2	Onarga fine sandy loam, moderately wet, 2 to 6 percent slopes, eroded
OnBT, NsBT, OnAT, OwA	Onarga sandy loam, till substratum, 2 to 6 percent slopes	OpB2	Onarga fine sandy loam, till substratum, 2 to 6 percent slopes, eroded
ObB, OrB, OtA, OtB, ObA, ObB3, OsB, OsC, OsC2	Ockley loam, 2 to 6 percent slopes	OrB	Ormas loamy sand, sandy substratum, 1 to 4 percent slopes
Ve, HbA	Papineau fine sandy loam, 0 to 2 percent slopes	PaA	Papineau fine sandy loam, 0 to 1 percent slopes
VeB2	Papineau fine sandy loam, 1 to 3 percent slopes	PaB	Papineau fine sandy loam, 1 to 3 percent slopes
Pp, Pp1, Pp2	Peotone silty clay loam	Pp	Peotone silty clay loam, pothole
Pt	Pits, quarry	Pt	Pits, quarry
Px1	Prochaska loamy sand, rarely flooded	Pu	Prochaska loamy sand, rarely flooded
Px	Prochaska loamy sand, frequently flooded	Px	Prochaska loamy sand, frequently flooded
PxA	Prochaska loamy sand, frequently flooded, undrained	Py	Prochaska loamy sand, frequently flooded, undrained
RtA, Rt, RtB, ShA	Ridgeville fine sandy loam	RtA	Ridgeville fine sandy loam, 0 to 2 percent slopes

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
RfA	Ridgevil e fine sandy loam, till substratum, 0 to 2 percent slopes	RuA	Ridgeville fine sandy loam, till substratum, 0 to 2 percent slopes
Ee, Rx	Eel silt loam, frequently flooded	Rv	Ross silt loam, frequently flooded
Sd	Sawabash silty clay loam, frequently flooded: undrained	Sd	Sawabash silty clay loam, frequently flooded, undrained
SeA, Se	Seafield fine sandy loam	SeA	Seafield fine sandy loam, 0 to 2 percent slopes
RnS	Rensselaer loam	Sf	Selma fine sandy loam
Rn, Ms, Sk, 2Sk	Selma silt loam	Sg	Selma silt loam
Sg, Mz, Sg1, Ms1	Sebewa loam	Sh	Selma loam, sandy substratum
SlA, Ma, Rd, Rs, Sl, Wt, Cd, Dx	Selma silty clay loam, till substratum	Sk	Selma silty clay loam, till substratum
SmA, 2NsA, 2NsB, OnLA, Ru, RuA, SmB, 2FoA, 2FoB	Simonin loamy sand, 1 to 3 percent slopes	SmB	Simonin loamy sand, 1 to 3 percent slopes
SrB, SpB, SrA	Sparta fine sand, 2 to 6 percent slopes	SrB	Sparta loamy fine sand, 1 to 4 percent slopes
Sw, LuA, SwA	Strole silt loam	SwA	Strole silty clay loam, 0 to 1 percent slopes
DgZ, 2Dg, MdA, MdB, MlA, AuA	Odell Variant-Ridgeville complex, 0 to 2 percent slopes	SxA	Sumava-Ridgeville-Odell complex, 0 to 2 percent slopes

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
SzA, St	Swygert silty loam, 0 to 2 percent slopes	SyA	Swygert silt loam, 0 to 2 percent slopes
LuB, JsB, JsB2, LuB2, Re, ReA, ReB	Lucas silty clay loam, 2 to 6 percent slopes	SzB2	Swygert Variant-Simonin complex, 2 to 6 percent slopes, eroded
LuC2, ReC2, LuC3, LuD2, LuD3	Lucas silty clay loam, 6 to 12 percent slopes, eroded	SzC2	Swygert Variant-Simonin complex, 6 to 15 percent slopes, eroded
TaA, Ta, TaB	Tedrow fine sand, 0 to 2 percent slopes	TaA	Tedrow loamy fine sand, 0 to 2 percent slopes
2My, Ed, My, Tt, EdS, Ed1, Ed2, 2Ed	Toto muck, drained	To	Toto muck, drained
Ud, G.p., B.p.	Udorthents, loamy	Ud	Udorthents, loamy
W, WATER	Water,	W	Water
Wa, Wb, Wb2	Wallkill silt loam	Wa	Wallkill loam, pothole
MsO, MsS	Wallkill Variant mucky silty clay loam	Wc	Wallkill Variant mucky silty clay
We	Watseka loamy sand	WeA	Watseka loamy sand, 0 to 1 percent slopes
WkA	Wesley fine sandy loam, 0 to 2 percent slopes	WkA	Wesley fine sandy loam, 0 to 1 percent slopes
Wy	Weiss fine sand, 0 to 2 percent slopes	ZaA	Zaborosky fine sand, 0 to 2 percent slopes

Field symbols	Field map unit name	Publication symbol	Approved map unit name
ZWyB, ZWy	Weiss-Oakville, wet substratum, 2 to 9 percent slopes, mocky	ZbB	Zaborosky-Oakville moderately wet complex, 2 to 9 percent slopes, hummocky
Za, Mg, Ml, Gt	Zadog-Maumee-Granby complex	Zg	Zadog-Granby complex

Series Established by this Correlation:

Ayrmount, type location in Newton County
Kentland, type location in Newton County
Sumava, type location in Newton County
Zaborosky, type location in Newton County

Series dropped or made Inactive

Weiss
Wooten

Newton County, Indiana

The cooperator names for the front cover are as follows:

United States Department of Agriculture
Soil Conservation Service
in cooperation with
Purdue University
Agricultural Experiment Station
and
Indiana Department of Natural Resources
State Soil Conservation Board and
Division of Soil Conservation

The credits to be given on page ii of the published soil survey are as follows:

"This survey was made cooperatively by the Soil Conservation Service, Purdue University Agricultural Experiment Station, and the Indiana Department of Natural Resources, State Soil Conservation Board and Division of Soil Conservation. It is part of the technical assistance furnished to the Newton County Soil and Water Conservation District. Financial assistance was made available by the Newton County Board of County Commissioners."

Prior Soil Survey Publications:
A prior soil survey was made for Newton County, Indiana, in 1955. The prior published soil survey will be included in the literature citations for the manuscript. The following will be published in the manuscript. "The first soil survey for Newton County was published by the U.S. Department of Agriculture in 1955. (Reference citation, see below). This survey updates the 1955 survey, provides a more detailed soil survey on aerial photography, and contains more interpretative information."

Soil Survey of Newton County, Indiana. By O. C. Rogers, Division of Soil Survey Bureau of Industry, Soils and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture and T. M. Bushnell, T.E. Barnes, Sutton Meyers, Glenn Robinson, P. T. Veale and A. P. Bell, Purdue University Agricultural Experiment Station, 144 pages, illus., 1955.

Instructions for Map Finishing:
The conventional and special symbols used in this survey are listed on the attached SCS-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 1986. Map compilation and finishing is being done by the party leader.

SCS-SOILS-37A
3-75

U.S. DEPARTMENT OF AGRICULTU
SOIL CONSERVATION SERVI

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

Soil Survey Area: NEWTON COUNTY
State: INDIANA

Date: 2/90

DESCRIPTION	SYMBOL
CULTURAL FEATURES	
BOUNDARIES	
National, state, or province	
County or parish	
Minor civil division	
Reservation (national forest or park, state forest or park, and large airport)	
Limit of soil survey (label)	
Field sheet matchline & neatline	
AD HOC BOUNDARY (label)	
Small airport, airfield, park, oilfield, cemetery, or flood 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	66
Federal	287
State	52
RAILROAD	
PITS	
Gravel pit	
Mine or quarry	

DESCRIPTION	SYMBOL
CULTURAL FEATURES (cont.)	
MISCELLANEOUS CULTURAL FEATURES	
Farmstead, house (omit in urban areas)	
Church	
School	
WATER FEATURES	
DRAINAGE	
Perennial, double line	
Perennial, single line	
Intermittent	
Drainage end	
Canals or ditches	
Drainage and/or irrigation	
LAKES, PONDS AND RESERVOIRS	
Perennial	water w
Intermittent	intermittent int
MISCELLANEOUS WATER FEATURES	
Marsh or swamp	
Wet spot	

DESCRIPTION	SYMBOL
SPECIAL SYMBOLS FOR SOIL SURVEY	
SOIL DELINEATIONS AND SOIL SYMBOLS	
ESCARPMENTS	CeA FoB2
Other than bedrock (points down slope)	
SHORT STEEP SLOPE	
MISCELLANEOUS	
Blowout	
Sandy spot	
Area (3-5 Ac) used as a landfill	¤
Very poorly drained soils in potholes	Φ
20" to 40" to bedrock	‡
Very severely eroded spot	#

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
AuA	Aubbeenaubbee-Whitaker complex, 0 to 2 percent slopes (where drained)
AyB	Ayr loamy fine sand, 1 to 4 percent slopes
AzA	Ayrmount loamy fine sand, 0 to 2 percent slopes
BbA	Barce-Corwin complex, 0 to 2 percent slopes
BfB2	Barce-Montmorenci complex, 1 to 4 percent slopes, eroded
Bh	Barry-Gilford complex (where drained)
By	Bryce silty clay loam (where drained)
CtA	Corwin fine sandy loam, 0 to 2 percent slopes
CtB2	Corwin fine sandy loam, 2 to 6 percent slopes, eroded
Cv	Craigmile sandy loam, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
DaA	Darroch fine sandy loam, 0 to 2 percent slopes (where drained)
DcA	Darroch silt loam, 0 to 2 percent slopes (where drained)
DdA	Darroch fine sandy loam, sandy substratum, 0 to 2 percent slopes (where drained)
DgA	Darroch loam, till substratum, 0 to 2 percent slopes (where drained)
EsB	Elston Variant fine sandy loam, 1 to 3 percent slopes
FeA	Foresman fine sandy loam, 0 to 2 percent slopes
FoA	Foresman silt loam, 0 to 2 percent slopes
FoB2	Foresman silt loam, 2 to 6 percent slopes, eroded
FrA	Foresman fine sandy loam, till substratum, 0 to 2 percent slopes
FrB2	Foresman fine sandy loam, till substratum, 2 to 6 percent slopes, eroded
FtA	Foresman silt loam, till substratum, 2 to 6 percent slopes, eroded
FtB2	Foresman silt loam, till substratum, 2 to 6 percent slopes, eroded
FwA	Foresman silt loam, moderately fine substratum, 0 to 2 percent slopes
GbA	Gilboa-Odell complex, 0 to 2 percent slopes (where drained)

PRIME FARMLAND--Continued

Map symbol	Soil name
Gf	Gilford fine sandy loam (where drained)
GhB	Glenhall loam, 1 to 4 percent slopes
Ir	Iroquois fine sandy loam (where drained)
MeA	Martinsville-Williamstown complex, 0 to 2 percent slopes
MeB2	Martinsville-Williamstown complex, 2 to 6 percent slopes, eroded
Mp	Montgomery silty clay loam (where drained)
MrB2	Montmorenci fine sandy loam, 2 to 6 percent slopes, eroded
OkB2	Octagon-Ayr complex, 2 to 6 percent slopes, eroded
OnA	Onarga fine sandy loam, moderately wet, 0 to 2 percent slopes
OnB2	Onarga fine sandy loam, moderately wet, 2 to 6 percent slopes, eroded
OpB2	Onarga fine sandy loam, till substratum, 2 to 6 percent slopes, eroded
PaA	Papineau fine sandy loam, 0 to 1 percent slopes (where drained)
PaB	Papineau fine sandy loam, 1 to 3 percent slopes (where drained)
RtA	Ridgeville fine sandy loam, 0 to 2 percent slopes (where drained)
RuA	Ridgeville fine sandy loam, till substratum, 0 to 2 percent slopes (where drained)
Rv	Ross silt loam, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
SeA	Seafield fine sandy loam, 0 to 2 percent slopes (where drained)
Sf	Selma fine sandy loam (where drained)
Sg	Selma silt loam (where drained)
Sh	Selma loam, sandy substratum (where drained)
Sk	Selma silty clay loam, till substratum (where drained)
SmB	Simonin loamy sand, 1 to 3 percent slopes
SwA	Strole silty clay loam, 0 to 1 percent slopes (where drained)
SxA	Sumava-Ridgeville-Odell complex, 0 to 2 percent slopes (where drained)
SyA	Swygert silt loam, 0 to 2 percent slopes (where drained)
SzB2	Swygert Variant-Simonin complex, 2 to 6 percent slopes, eroded
WkA	Wesley fine sandy loam, 0 to 1 percent slopes (where drained)

PRIME FARMLAND--Continued

Map symbol	Soil name
Zg	Zadog-Granby complex (where drained)

Certifications

1. Mapping was completed December 1986.

2. The General Soils Map has been joined to the maps of the following published or correlated soil surveys in Indiana and Illinois.

a.	Jasper County, Indiana	(Correlated in 1985)
b.	Benton County, Indiana	(Correlated in 1985)
c.	Kankakee County, Illinois	(Correlated in 1979)
d.	Iroquois County, Illinois	(Correlated in 1980)
e.	Lake County, Indiana	(Correlated in 1967

A thorough attempt was made to join lines and names. The names of the mapping units have some differences because of changes in concepts, design of mapping units, newly established series, and proportion of soil within the mapping unit.

A detailed account of the General Soils Map joins is on file in the state office.

3. The detailed maps have been joined with the maps from all counties listed above. A thorough attempt was made to join all counties. Some differences in soil names and map unit composition exist due to legend design and recent laboratory data and transect data. Map units joined across county boundaries have soils with similar drainage classes and slope breaks in nearly all cases even though the names do not join. A detailed account of the soil survey map joins is on file in the state office.

4. Interpretations that will be published in the report are consistent with those on the Soil Interpretation Records except as noted in the notes section for the following map units: Co, Pp, Wa, and ZbB.

5. All typifying pedons used for classification are accurately classified according to Soil Taxonomy.

6. Soil maps have been reviewed for completeness, accuracy, and consistency.

Bobby J. Ward — 4-9-90

Bobby J. Ward — Date

CONVERSION LEGEND FOR
NEWTON COUNTY, INDIANA

Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
		CoA	CtA	FuB2	FrB2	McB2	BfB2
Ac	Ac	CpA	AuA	FxB	GhB	MdA	SxA
AcC	Ac	Cr	Cr	G.p.	Ud	MdB	SxA
AcS	Af	Cr1	Ke	GbA	GbA	MeA	MeA
AdA	NsB	CtA	CtA	Gf	Gf	MeB	MeB2
AdB	NsB	CtB	CtB2	Gf1	Gf	MeB2	MeB2
An	Ad	CtB2	CtB2	Gft	Bh	MeC2	MeB2
An1	Ac	Cv	Cv	Gg	Gf	MeE2	MnE
Ap	Ap	CvA	Cz	Gt	Gt	Mf	Bh
Ap1	Ap	Cw	DdA	Gt	Zg	MfA	DdA
Aq	Ar	CyA	AuA	Gt1	Gn	Mg	Zg
AsA	OnA	CyB	AuA	Gt2	Af	Mh	Gt
AsB	OnB2	CyB2	AuA	Hb	Ho	Mh1	Mk
AtA	GbA	CS	BbA	HbA	PaA	Mh2	Mk
AuA	SxA	Dc	DcA	HdA	AuA	MhM	Mk
AyA	AzA	Dd	DcA	HhC2	MnC2	Ml	Zg
AyB	AyB	Df	DaA	HmH	Mh	MlA	SxA
AyC	OkB2	Dg	DgA	Ho	Ho	MmA	MeA
AyD	OcC2	DgZ	SxA	Ir	Ir	MmB	MeB2
B.p.	Ud	Dx	Sk	JaA	FtA	MmC2	MnC2
Bd	Mp	Ed	To	JaA2	FtA	MnA	MeA
BeZ	BmB	Ed1	To	JaB2	FtB2	MnB2	MeB2
BeA	BmB	EdZ	To	JsB	SzB2	MnC2	MnC2
BeB	BmB	EdS	To	JsB2	SzB2	MnC3	MnC2
BfA	BbA	Ee	Rv	JtA	FtA	MnD2	MnE
BfB2	BfB2	Fo	FoA	JtA2	FtA	MnE2	MnE
BfC2	BfB2	FoA	FoA	JtB	FtB2	MoB3	MeB2
BfD3	MnE	FoB	FoB2	JtB2	FrB2	MoC2	MnC2
BgA	EsB	FoB2	FoB2	JtC2	FrB2	MoC3	OcC2
BgB	OnB2	FoC	FoB2	JtD2	MnE	MoE2	MnE
BmA	GhB	FoC2	FoB2	Ke	Ke	Mp	By
BoA	OnA	FpA	FeA	LuA	SwA	Mr1	MuA
Br	Bh	FsA	FwA	LuB	SzB2	Ms	Sg
By	By	FsB	FoB2	LuB2	SzB2	Ms1	Sh
Ca	Cz	FsB2	FtB2	LuC2	SzC2	MsO	Wc
Cd	Sk	FtA	FtA	LuC3	SzC2	MsS	Wc
ChA	ObB	FtB	FtB2	LuD2	SzC2	MtA	BbA
ChB	OaB	FtB2	FtB2	LuD3	SzC2	MtB	MrB2
ChC	OaC	FtC3	MnC2	Ma	Sk	MtB2	MrB2
Co	Co	FuA	FrA	Marsh	Ar	MtB3	MrB2

Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
MtC3	OcC2	OsC2	OrB	Sg1	Sh	WhC	OnB2
Mu	MuA	OtA	OrB	ShA	RtA	Wk	AuA
Mv	MuA	OtB	OrB	Sk	Sg	WkA	WkA
Mw	MuA	OwA	OpB2	Sl	Sk	Wn	AuA
MxB	MrB2	PdA	BbA	SlA	Sk	Wo	Bh
My	To	PdB	BfB2	SmA	SmB	WpA	MeA
Mz	Sh	PdB2	OkB2	SmB	SmB	WpB	MeB2
Ne	Nw	PdC2	OcC2	Sn	Co	WpB2	MeB2
NeA	NsA	PdD2	OcC2	Sp	Co	Wt	Sk
NsA	NsA	Pg	EsB	SpB	SrB	Wx	Gt
NsB	NsB	Pp	Pp	SrA	SrB	Wx1	Ke
NsBT	OpB2	Pp1	Pp	SrB	SrB	Wy	ZaA
NsC	NsB	Pp2	Pp	St	SyA	WATER	W
Nw	Nw	Pt	Pt	Sw	SwA	Za	Zg
OaA	ObB	Px	Px	SwA	SwA	2AyA	EsB
OaB	OaB	Px1	Pu	Sx	Cv	2AyB	EsB
OaC	OaC	PxA	Py	SxA	Cz	2Dc	DgA
OaC2	OaC	Rd	Sk	SyA	BbA	2Dg	SxA
ObA	OrB	Re	SzB2	SyA2	BbA	2Ed	To
ObB	OrB	ReA	SzB2	SyB2	BfB2	2FoA	SmB
ObB3	OrB	ReB	SzB2	SyC2	BfB2	2FoB	SmB
OcA	BbA	ReC2	SzC2	SzA	SyA	2FtA	AzA
OcB	OkB2	RfA	RuA	Ta	TaA	2FtB	FtB2
OcC2	OcC2	Rn	Sg	TaA	TaA	2FtB2	FrB2
OcC3	OcC2	RnS	Sf	TaB	TaA	2MfA	DdA
OcD2	OcC2	Rs	Sk	TbA	GhB	2My	To
OeA	GbA	RsZ	Bh	TbB	GhB	2NsA	SmB
OnA	OnA	Rt	RtA	Tt	To	2NsB	SmB
OnAT	OpB2	RtA	RtA	Ud	Ud	2Rs	Bh
OnB	OnB2	RtB	RtA	Ve	PaA	2Sc	GhB
OnB2	OnB2	Ru	SmB	VeB2	PaB	2ScA	GhB
OnBT	OpB2	RuA	SmB	W	W	2ScB	GhB
OnC	OnB2	Rx	Rv	Wa	Wa	2Sk	Sg
OnC2	OnB2	Sc	GhB	Wb	Wa	2Wy	ZbB
OnC3	OcC2	ScA	GhB	Wb2	Wa	2WyB	ZbB
OnD3	OcC2	ScB	GhB	Wd	Bh	3FoB	FrB2
OnLA	SmB	Sd	Sd	We	WeA	3FoB2	FoB2
OrB	OrB	Se	SeA	WhA	GhB	3FtA	AzA
OsB	OrB	SeA	SeA	WhB	GhB	3FtB2	FrB2
OsC	OrB	Sg	Sh	WhB2	GhB	4Mh	Mh

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS
Newton County, Indiana

I. Laboratory Data From NSSL

Sampled As	Pedon Sample Number	Publication Symbol	Approved Name or Classification
Zadog	S83IN-111-012	Zg	Zadog
Morocco	S83IN-111-117	MuA	Morocco
Weiss	S83IN-111-006	ZaA	1/ 2/ Zaborosky
Odell Variant	S84IN-111-013	SxA	1/ 2/ Sumava

II. Laboratory Data From Indiana State Highway Testing Laboratory

Sampled As	Pedon Sample Number	Publication Symbol	Approved Name or Classification
Parr	S85IN-111-014	OkB2	Parr (inclusion)
Corwin	S85IN-111-015	CtB2	Corwin
Simonin	S85IN-111-016	SmB	Simonin
Oakville	S85IN-111-019	OaC	Oakville

III. Laboratory Data From Purdue University

Sampled As	Pedon Sample Number	Publication Symbol	Approved Name or Classification
Strole	S73IN56-1	SwA	Strole
Octagon	S83IN-111-014	BfB2	Octagon taxadjunct; fine, mixed, mesic, Typic Hapludalf; inclusion in map unit.
Foresman, till substratum	S83IN-111-015	FtA	Foresman, silt thickness greater than series range.
Craigmile	S83IN-111-026	Cz	2/ Craigmile taxadjunct; sandy, mixed, mesic; Fluvaquentic Haplaquolls.

1/ Type location for the series.
2/ Typical pedon

III. Laboratory Data from Purdue University (continued)

Sampled As	Pedon Sample Number	Publication Symbol	Approved Name or Classification
Prochaska	S83IN-111-039	Py	Prochaska
Selma	S83IN-111-048	Sk	Selma
Darroch	S84IN-111-008	DcA	Darroch taxadjunct; fine-silty, mixed, mesic Aquic Argiudoll
Selma	S84IN-111-024	Sg	Selma taxadjunct; fine-silty, mixed, mesic, Typic Haplaquoll.
Wolcott	S84IN-111-025	Sk	Wolcott; inclusion in map unit.
Wallkill Variant	S86IN-111-002	Wc	2/ Wallkill Variant
Gilford	S86IN-111-005	Gf	2/ Gilford
Sawmill Variant	S86IN-111-007	Sd	Sawabash taxadjunct; fine, mixed, mesic, (calcareous) Fluvaquentic Haplaquolls.
Ridgeville	S86IN-111-009	SxA	Ridgeville taxadjunct; sandy, mixed, mesic, Aquic Hapludoll.
Simonin Variant	S86IN-111-015	SzB2	2/ Simonin

IV. Partial Pedon Laboratory Data From NSSL

Sampled As	Pedon Sample Number	Publication Symbol	Approved Name or Classification
Ackerman	S85IN-111-29	Ac	Martisco Variant (surface sample only)
Ackerman	S85IN-111-30	Ac	Martisco Variant (surface sample only)

V. Partial Pedon Laboratory Data from Purdue University

Sampled As	Pedon Sample Number	Publication Symbol	Approved Name or Classification
Martisco Variant	S85IN-111-34	Ac	Martisco Variant (surface sample only)
Maumee	S85IN-111-33	Mk	Maumee (surface sample only)
Wooten	S85IN-111-28	Ke	Kentland (surface sample only)
Wooten	S85IN-111-31	Ke	Kentland (surface sample only)
Wooten	S85IN-111-32	Ke	Kentland (surface sample only)

NOTES ON
CLASSIFICATION AND CORRELATION
OF THE SOILS OF
NEWTON COUNTY, INDIANA
by Bill Hosteter

ADRIAN VARIANT
This soil differs from Adrian in that it formed in less than 16 inches of organic material and the underlying sandy material. It classifies as sandy, mixed, mesic, Histic Humaquept.

AYRMOUNT SERIES
This series is established by this correlation. It formed in sandy sediments and the underlying loam till. It classifies as sandy over loamy, mixed, mesic, Typic Argiudoll.

COMFREY SERIES
Capability unit 5w is assigned to map unit Co rather than 6w as on the SIR to be consistent with other undrained soils on floodplains in Indiana.

CONRAD SERIES
The classification of this series is changed to mixed, mesic, Mollic Psammaquent. Carbonates are at a depth of 20-40 inches. It was correlated in the previous survey of Newton County as mixed, mesic, Typic Psammaquent.

CRAIGMILE SERIES
This soil is a taxadjunct. It does not have contrasting textures because the fine sand and coarser percentage is >50 percent in the coarse-loamy portion. It classifies as sandy, mixed, mesic, Fluvaquentic Haplaquoll.

ELSTON VARIANT
This soil formed in loamy and sandy outwash. It classifies as coarse-loamy, mixed, mesic, Typic Argiudoll. It differs from the well drained Elston soil in that it has a water table at a depth of 2.5-4 feet.

FORESMAN SERIES
Map units FtA and FtB2 are located in the southern part of the county and are underlain by firm loam till. Map units FrA and FrB2 are located on the Iroquois Moraine in the north central part of the county and are underlain by friable loam till. Map unit FwA is located on the Iroquois River outwash plain and is underlain by firm silty clay loam sediments.

KENTLAND SERIES
This series is established by this correlation. It formed in sandy sediments and a thin layer of organic material. It classifies as sandy, mixed, mesic, Typic Haplaquoll. Many areas of this soil were mapped as Wooten in the 1955 soil survey.

MARTISCO VARIANT
This soil formed in marl, coprogenous earth, and sand. It classifies as coarse-silty, mixed, (calcareous), mesic, Typic Humaquept. It differs from Martisco in that it is calcareous to the surface, does not have an organic surface layer and has sandy textures in the underlying material.

Notes on Classification and Correlation
of Soils of Newton County, Indiana

MONTMORENCI SERIES
This soil is a taxadjunct because gray mottles are not within the upper 10 inches of the argillic horizon. It classifies as fine-loamy, mixed, mesic, Mollic Hapludalf.

NEWTON SERIES
This soil is a taxadjunct because it does not have a dark colored layer thick enough to qualify as an Umbric epipedon. It classifies as mixed, mesic, Typic Psammaquent.

PAPINEAU SERIES
The 2Bt horizon has higher chroma than allowed for the series.

PEOTONE SERIES
This soil is in low lying potholes which are difficult to adequately drain. Capability class 4w is assigned to map unit Pp.

SIMONIN
This soil formed in sandy and loamy outwash and the underlying till rather than outwash and clayey sediments as the series requires. Because of limited acreage, similar interpretations, and also because additional acreage is not likely to be mapped, this unit was not proposed as a new series.

SUMAVA SERIES
This series is established by this correlation. It formed in loamy outwash and friable glacial till on the Iroquois Moraine. It classifies as coarse-loamy, mixed, mesic, Aquic Argiudoll.

SWYGERT VARIANT
This soil formed in clayey glacial till. It classifies as fine, mixed, mesic, Mollic Hapludalf. It differs from Swygert in that it does not have a mollic epipedon and also gray mottles are too deep to classify as an Aquic Argiudoll.

WALLKILL SERIES
This soil has a mollic epipedon more than 24 inches thick but classification is not affected. This unit is in low lying potholes which are difficult to adequately drain. Capability class 4w is assigned.

WALLKILL VARIANT
This soil formed in clayey sediments overlying organic material. Classification is fine, mixed, mesic, Thapto Histic Fluvaquent. It differs from Wallkill in that it has more clay in the control section.

ZABOROSKY SERIES
This soil is established by this correlation. This soil formed in wind worked sandy deposits over sandy lake-bed sediments. It classifies as mixed, mesic, Aquic Udipsamment. Many areas of this soil were mapped as Weiss in the 1955 soil survey. Map unit ZbB is assigned capability class 6s because of the hummocky topography which restricts use.

CLASSIFICATION OF THE SOILS

Soil name	Family or higher taxonomic class
Ackerman	Sandy, mixed, mesic Histic Humaquepts
Adrian	Sandy or sancy-skeletal, mixed, euic, mesic Terric Medisaprists
Adrian Variant.	Sandy, mixed, mesic Histic Humaquepts
Algansee	Mixed, mesic Aquic Udipsamments
Aquolls	Sandy, mixed, mesic Typic Haplaquolls
Aubbeenaubbee	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Ayr	Sandy over loamy, mixed, mesic Typic Argiudolls
Ayrmount	Sandy over loamy, mixed, mesic Typic Argiudolls
Barce	Fine-loamy, mixed, mesic Typic Argiudolls
Barry	Fine-loamy, mixed, mesic Typic Argiaquolls
Brems	Mixed, mesic Aquic Udipsamments
Bryce	Fine, mixed, mesic Typic Haplaquolls
Comfrey	Fine-loamy, mixed, mesic Cumulic Haplaquolls
Conrad	Mixed, mesic Typic Psammaquents
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
Elston Variant.	Coarse-loamy,mixed,mesic Typic Argiudolls
Foresman	Fine-loamy, mixed, mesic Typic Argiudolls
Gilboa	Fine-loamy, mixed, mesic Aquic Argiudolls
Gilford	Coarse-loamy, mixed, mesic Typic Haplaquolls
Glenhall	Fine-loamy, mixed, mesic Mollic Hapludalfs
Granby	Sandy, mixed, mesic Typic Haplaquolls
Houghton	Euic, mesic Typic Medisaprists
Iroquois	Fine-loamy over clayey, mixed, mesic Typic Argiaquolls
Kentland	Sandy, mixed, mesic Typic Haplaquolls
Martinsville	Fine-loamy, mixed, mesic Typic Hapludalfs
Martisco Variant.	Coarse-silty, mixed (calcareous), mesic Typic Humaquepts
Maumee	Sandy, mixed, mesic Typic Haplaquolls
Miami	Fine-loamy, mixed, mesic Typic Hapludalfs
Montgomery	Fine, mixed, mesic Typic Haplaquolls
*Montmorenci	Fine-loamy, mixed, mesic Aquollic Hapludalfs
Morocco	Mixed, mesic Aquic Udipsamments
Nesius	Sandy, mixed, mesic Entic Hapludolls
*Newton	Sandy, mixed, mesic Typic Humaquepts
Oakville	Mixed, mesic Typic Udipsamments
Octagon	Fine-loamy, mixed, mesic Mollic Hapludalfs

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
Odell	Fine-loamy, mixed, mesic Aquic Argiudolls
Onarga	Coarse-loamy, mixed, mesic Typic Argiudolls
Ormas	Loamy, mixed, mesic Arenic Hapludalfs
Papineau	Fine-loamy over clayey, mixed, mesic Aquic Argiudolls
Peotone	Fine, montmorillonitic, mesic Cumulic Haplaquolls
Prochaska	Sandy, mixed, mesic Fluvaquentic Haplaquolls
Ridgeville	Coarse-loamy, mixed, mesic Aquic Argiudolls
Ross	Fine-loamy, mixed, mesic Cumulic Hapludolls
Sawabash	Fine-silty, mixed (calcareous), mesic Cumulic Haplaquolls
Seafield	Coarse-loamy, mixed, mesic Udollic Ochraqualfs
Selma	Fine-loamy, mixed, mesic Typic Haplaquolls
Simonin	Coarse-loamy over clayey, mixed, mesic Typic Argiudolls
Simonin	Coarse-loamy over clayey, mixed, mesic Typic Argiudolls
Sparta	Sandy, mixed, mesic Entic Hapludolls
Strole	Fine, illitic, mesic Aquic Argiudolls
Sumava	Coarse-loamy, mixed, mesic Aquic Argiudolls
Swygert	Fine, mixed, mesic Aquic Argiudolls
Swygert Variant.	Fine, mixed, mesic Mollic Hapludalfs
Tedrow	Mixed, mesic Aquic Udipsamments
Toto	Coprogenous, euic, mesic Limnic Medisaprists
Udorthents	Udorthents
Wallkill	Fine-loamy, mixed, nonacid, mesic Thapto-Histic Fluvaquents
Wallkill Variant.	Fine, mixed, mesic Thapto-Histic Fluvaquents
Watseka	Sandy, mixed, mesic Aquic Hapludolls
Wesley	Coarse-loamy, mixed, mesic Aquic Hapludolls
Whitaker	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Williamstown	Fine-loamy, mixed, mesic Aquic Hapludalfs
Zaborosky	Mixed, mesic Aquic Udipsamments
Zadog	Coarse-loamy, mixed, mesic Typic Haplaquolls