

SOIL
CLASSIFICATION AND CORRELATION
FOR
TIPPECANOE COUNTY
INDIANA



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

FEBRUARY 1990

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

Classification and Correlation
of the Soils of
Tippecanoe County, Indiana
February 1990

This correlation was prepared in February 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. Tom Ziegler, Soil Survey Party Leader, participated in the Final Field Review. Roger Haberman, Soil Correlator, MNTC, participated in the Comprehensive Field Review in December 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
TIPPECANOE COUNTY, INDIANA

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
ApP, Hw, Am	Allison silt loam, protected	Am	Allison silt loam, protected
Ap, Ar	Allison silt loam, frequently flooded	Ap	Allison silt loam, frequently flooded
AtB2, PrB2, CpB, CpB2, CsB, SzB2, SzB, AtB, CpA, PnB, XaB2, XaB	Alvin sandy loam, 2 to 6 percent slopes	AtB2	Alvin-Spinks complex, 2 to 6 percent slopes, eroded
AwP, Au	Armiesburg Variant silt loam, protected	Ba	Battleground silt loam, protected
Aw, Nm	Armiesburg Variant silty clay loam, frequently flooded	Bb	Battleground silt loam, frequently flooded
BgA, BnA	Beecher silt loam, 0 to 2 percent slopes	BgA	Beecher silt loam, 0 to 2 percent slopes
BfF, HfF, BkF	Berks channery silt loam, 25 to 60 percent slopes	BkF	Berks channery silt loam, 25 to 60 percent slopes
BmA, BIA	Billett fine sandy loam, 0 to 2 percent slopes	BIA	Billett fine sandy loam, gravelly substratum, 0 to 2 percent slopes
BmB, BIB2, BmB2	Billett fine sandy loam, 2 to 6 percent slopes, eroded	BIB2	Billett fine sandy loam, gravelly substratum, 2 to 6 percent slopes, eroded
FoA, FiA, FnA, XaA, OcA, Fi	Foresman Variant fine sandy loam, 0 to 2 percent slopes	BmA	Billett fine sandy loam, moderately wet, 0 to 2 percent slopes

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
LsA, LrA	Longlois Variant loam, 0 to 2 percent slopes	BnA	Billett loam, gravelly substratum, 0 to 2 percent slopes
LsB2, LrB, LrB2, LsB, DtB2	Longlois Variant loam, 2 to 6 percent slopes, eroded	BnB2	Billett loam, gravelly substratum, 2 to 6 percent slopes, eroded
BoA, LvA, LuA, BcA	Bowes silt loam, 0 to 2 percent slopes	BoA	Bowes silt loam, 0 to 2 percent slopes
BpA	Bowes Variant silt loam, 0 to 2 percent slopes	BpA	Bowes Variant silt loam, 0 to 2 percent slopes
CaA	Camden silt loam, 0 to 2 percent slopes	CaA	Camden silt loam, 0 to 2 percent slopes
CfB, WnB, WnB2, CfB2	Carmi sandy loam, 2 to 6 percent slopes	CfB	Carmi sandy loam, 2 to 6 percent slopes
CgA	Carmi loam, 0 to 2 percent slopes	CgA	Carmi loam, 0 to 2 percent slopes
Ck, Cy, Mn, RpA, Ho, QIA, Ad	Ceresco sandy loam, gravelly substratum, rarely flooded	Ck	Ceresco sandy loam, gravelly substratum, rarely flooded
Ch, MI, Mm, Ef, Sl, Be, Cg	Ceresco loam, gravelly substratum, occasionally flooded	Cl	Ceresco loam, gravelly substratum, occasionally flooded
Cn	Chalmers silty clay loam	Cm	Chalmers silty clay loam
Sy	Cohoctah clay loam, gravelly substratum, rarely flooded	Co	Cohoctah fine sandy loam, gravelly substratum, rarely flooded
Cr	Cohoctah loam, occasionally flooded	Cp	Cohoctah loam, gravelly substratum, occasionally flooded

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
CpC2, CsC, CpC, CpD2, CpD, PnC, PnC2, PnD, PnD2, CrC2	Coloma sand, 6 to 15 percent slopes, eroded	CrC	Coloma sand, 6 to 15 percent slopes
CzA	Crosby silt loam, 0 to 2 percent slopes	CtA	Crosby silt loam, 0 to 2 percent slopes
YfB2, CvB, CvB2, CzB, CzB2, FeB, FeB2, GnB, GnB2, MsB2, OdB, OdB2, WsB, WsB2, WvB, WvB2, CwB, MsB	Crosby-Miami silt loams, 2 to 6 percent slopes, eroded	CwB2	Crosby-Miami complex, 2 to 6 percent slopes, eroded
DtC2, WnC, DtC, DtC3, EsC, EsC2, LsC, LsC2, WoC, WoC2, BmC, BmC2, LuC, LuC2, LrC2, LrC	Dresden gravelly loam, 6 to 12 percent slopes, eroded	DmC2	Desker gravelly sandy loam, 6 to 12 percent slopes, eroded
Drc2, LtC2, LtC3, WpC, WpC2, DsC3, CeC2, CeC3, WrC, WrC2, DmC3	Dresden loam, kame, 6 to 12 percent slopes, eroded	DoC2	Desker sandy loam, kame, 6 to 12 percent slopes, eroded
DrD2, LtD2, LtD3, WpD, WpD2, DsD, CeD2, CeD3, DtD2, DtD3, DmD2, DnD, BmD3, DrD3, DtD	Dresden Variant- Rodman complex, kame, 12 to 18 percent slopes, eroded	DpD2	Desker-Rodman complex, kame, 12 to 18 percent slopes, eroded
Du, Av, DuS, Dw	Drummer silty clay loams	Du	Drummer soils

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
Ru, Rt, Dy	Ross loam, frequently flooded	Dy	Du Page loam, frequently flooded
EsA, CfA, EtA, SrA, EkA	Elston sandy loam, gravelly substratum, 0 to 2 percent slopes	EkA	Elston sandy loam, gravelly substratum, 0 to 2 percent slopes
WnA, EmA	Elston loam, gravelly substratum, 0 to 2 percent slopes	EmA	Elston loam, gravelly substratum, 0 to 2 percent slopes
FcA	Fincastle-Crosby silt loams, 0 to 2 percent slopes	FcB	Fincastle-Crosby complex, 1 to 3 percent slopes
Hp, Hd	Harpster silty clay loam	Hd	Harpster silt loam, pothole
HfB2, HfA, HfB	High Gap silt loam, 2 to 6 percent slopes, eroded	HfB2	High Gap Variant silt loam, 1 to 6 percent slopes, eroded
HfC2, HfC, HfC3, HfD, HfD2, HfD3, HgC3	High Gap silt loam, 6 to 12 percent slopes, eroded	HfC2	High Gap Variant silt loam, 6 to 12 percent slopes, eroded
CbB, CbB2, SkB, SkB2, BrB2, BsB3, OtB, OtB2, HoB, HoB2, OxB, OxB2, HnB	Hononegah loamy sand, 2 to 6 percent slopes	HnB	Hononegah loamy sand, 2 to 6 percent slopes
CbA, SkA, AhA, OtA, HnA, OxA, HoA	Carmi sandy loam, 0 to 2 percent slopes	HoA	Hononegah fine sandy loam, 0 to 2 percent slopes
Hv	Houghton muck, undrained	Hv	Houghton muck, undrained
OfA, AtA, PrA, FsA, KaA	Ockley loam, 0 to 2 percent slopes	KaA	Kalamazoo loam, 0 to 2 percent slopes

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
OfB2, OfB, FsB, FsB2, KaB2	Ockley loam, 2 to 6 percent slopes, eroded	KaB2	Kalamazoo loam, 2 to 6 percent slopes, eroded
OgB2, OgB, FuB3, Rwb2	Ockley silt loam, 2 to 6 percent slopes, eroded	KbB2	Kalamazoo silt loam, 2 to 6 percent slopes, eroded
OeB2, OeB, FrB, FrB2, OhB, OhB2	Ockley silt loam, kame, 2 to 6 percent slopes, eroded	KcB2	Kalamazoo silt loam, kame, 2 to 6 percent slopes, eroded
Frc2, OeC, OeC2, FrC, Frc3, OeC3, OhC, OhC2, OhC3	Fox loam, kame, 6 to 12 percent slopes, eroded	KcC2	Kalamazoo silt loam, kame, 6 to 12 percent slopes, eroded
FrD2, OeD, OeD2, FrD, FrD3, OeD3, OhD, OhD2, OhD3, FsD, FsD2, OgD, OgD2, FuD, FuD2	Fox loam, kame, 12 to 18 percent slopes, eroded	KoD2	Kosciusko sandy loam, 12 to 18 percent slopes, eroded
FuC3, OkC3, OgC, OgC2, OfC, OfC2, OfC3, OgC3, OtC, SkC, OxC, OxC2, OxC3, BsC3, BrC2, CbC2, FsC2, FtC2, FtC3, CdC3, BrC, CbC, KpC3	Fox clay loam, 6 to 12 percent slopes, severely eroded	KpC3	Kosciusko gravelly sandy clay loam, 6 to 12 percent slopes, severely eroded
BWA	Brenton Variant silt loam, 0 to 2 percent slopes	LaA	Lafayette silt loam, 0 to 2 percent slopes

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
De, Di	Darroch silt loam	LeA	La Hogue loam, till substratum, 0 to 2 percent slopes
LbW, GeD, Ged, Gf, Lm	Landes silt loam, frequently flooded	Lm	Lash silt loam, frequently flooded
JbA	Jasper Variant silt loam, 0 to 2 percent slopes	LnA	Lauramie silt loam, 0 to 2 percent slopes
JbB2, JbB, HcB, HcB2, PxB, PoB, PoB2	Jasper Variant silt loam, 2 to 6 percent slopes, eroded	LnB2	Lauramie silt loam, 2 to 6 percent slopes, eroded
JaA	Jasper loam, till substratum, 0 to 2 percent slopes	LoA	Linkville loam, loamy substratum, 0 to 2 percent slopes
JaB	Jasper loam, till substratum, 2 to 6 percent slopes	LoB	Linkville loam, loamy substratum, 2 to 6 percent slopes
LuB2, LuB, WoB, WoB2, BoB, BoB2, WgB, WgB2	Longlois silt loam, 2 to 6 percent slopes, eroded	LVB2	Longlois silt loam, 2 to 6 percent slopes, eroded
LtB2, LtB, LtB3, DrB, DrB2, CeB, CeB2, WpB, WpB2, WrB	Longlois silt loam, kame, 2 to 6 percent slopes, eroded	LWB2	Longlois silt loam, kame, 2 to 6 percent slopes, eroded
Mb, Wt, Ph	Mahalasville silty clay loam, gravelly substratum	Mb	Mahalasville silty clay loam, gravelly substratum
Mc, My, Mv	Mahalasville silty clay loam, shale substratum	Mc	Mahalasville silty clay loam, shale substratum
Ma, Tr, Yh, By, Rh	Mahalasville silty clay loam	Md	Mahalasville-Treaty complex

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
McB2, McA, McB3, McB	Markham Variant silt loam, 1 to 4 percent slopes, eroded	MmB2	Marker silt loam, 2 to 6 percent slopes, eroded
HcA, MoA	Harvard Variant silt loam, 0 to 2 percent slopes	MoA	Mellott silt loam, 0 to 2 percent slopes
MsC2, MsC, GnC2, GnC, MtC	Miami silt loam, 6 to 12 percent slopes, eroded	MsC2	Miami silt loam, 6 to 12 percent slopes, eroded
MsD2, GnD, GnD2, JbD, JbD2, MfD2, MoD, MoD2, MsD, OmD, OmD2, PcD, PeD, PeD2	Miami silt loam, 12 to 18 percent slopes, eroded	MsD2	Miami silt loam, 12 to 18 percent slopes, eroded
MtC3, GnC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	MtC3	Miami clay loam, 6 to 12 percent slopes, severely eroded
MtD3, GnD3, OmD3, MfD3	Miami clay loam, 12 to 18 percent slopes, severely eroded	MtD3	Miami clay loam, 12 to 18 percent slopes, severely eroded
Mu	Milford silty clay loam, pothole	Mu	Milford silty clay loam, pothole
MWA	Millbrook silt loam, gravelly substratum, 0 to 2 percent slopes	MWA	Mulvey silt loam, 0 to 2 percent slopes
Xs, Ht	Muskego muck	Mz	Muskego muck, drained
GtB2, GtB	Oakville-Billett moderately wet, complex, 2 to 6 percent slopes, eroded	OaB2	Oakville-Billett moderately wet, complex, 2 to 6 percent slopes, eroded

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
OgA, RWA	Ockley silt loam, 0 to 2 percent slopes	OgA	Ockley silt loam, 0 to 2 percent slopes
OmB2, PeB, PeB2, OmB	Octagon silt loam, 2 to 6 percent slopes, eroded	OmB2	Octagon silt loam, 2 to 6 percent slopes, eroded
OmC2, OmC, McC, McC2, JbC, JbC2, LnC2, HcC2, HcC, PcC, PcC2, PeC, PeC2	Octagon silt loam, 6 to 12 percent slopes, eroded	OmC2	Octagon silt loam, 6 to 12 percent slopes, eroded
OmC3, McC3, JbC3, OpC3, OnC3	Octagon clay loam, 6 to 12 percent slopes, severely eroded	OpC3	Octagon clay loam, 6 to 12 percent slopes, severely eroded
Lb, Ou	Landes Variant silt loam, frequently flooded	Ou	Quiatenon sandy loam, frequently flooded
Lc, Lh, AbM, Lg, AcM, Ld, Ge, GeM, Sw, Dw	Landes Variant loamy sand, occasionally flooded	Ox	Quiatenon loamy sand, occasionally flooded
LcW, Lk, Oy	Landes fine sandy loam, sandy substratum, frequently flooded	Oy	Quiatenon fine sandy loam, sandy substratum, frequently flooded
Pc, Mg, Ag, PcB	Palms muck	Pc	Palms muck, drained
Ak, To	Adrian muck	Pd	Palms muck, gravelly substratum, undrained
Pg	Pella silty clay loam, pothole	Pg	Pella silty clay loam, pothole
Pk	Peotone silty clay loam	Pk	Peotone silty clay loam, pothole

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
PaB, FaC, FaD, FaA, FaB, PmB	Piankeshaw Variant gravelly sandy loam, rarely flooded, 2 to 8 percent slopes	PmB	Pinevillage gravelly sandy loam, 2 to 8 percent slopes, rarely flooded
Gp	Pits, gravel	Pt	Pits, gravel
RaB2, XkB, XkB2	Rainsville silt loam, 2 to 6 percent slopes, eroded	RaB2	Rainsville silt loam, 2 to 6 percent slopes, eroded
BzA, BvA, EIA	Raub-Brenton silt loams, 0 to 2 percent slopes	RcA	Raub-Brenton complex, 0 to 1 percent slopes
MpA, RkA, MfA, MdA	Martinsville Variant silt loam, 0 to 2 percent slopes	RdA	Richardville silt loam, 0 to 2 percent slopes
MpB2, RkB2, MfB2, RkB, MfB, MdB2, MdB, CaB, CaB2, MpB	Martinsville Variant silt loam, 2 to 6 percent slopes eroded	RdB2	Richardville silt loam, 2 to 6 percent slopes, eroded
MfC2, MfC, MfC3, RkC, RkC2, RkC3, MdC, MdC2, MdC3, MpC, MpC2, MpC3	Martinsville Variant silt loam, 6 to 12 percent slopes eroded	RdC2	Richardville silt loam, 6 to 12 percent slopes, eroded
CvA, XkA, MsA, WvA, RoB	Camden silt loam, moderately wet, 0 to 2 percent slopes	RoB	Rockfield silt loam, 1 to 3 percent slopes
RsF, WnF	Rodman gravelly loam, 25 to 60 percent slopes	RsF	Rodman gravelly loam, 25 to 60 percent slopes
RtP	Ross silt loam, protected	Rz	Ross silt loam, protected

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
Sd	Saranac silty clay loam, gravelly substratum, occasionally flooded	Sd	Saranac silty clay loam, gravelly substratum, occasionally flooded
Qm, QmA	Sawmill Variant silt loam, frequently flooded	Sf	Sawabash silty clay loam, frequently flooded
ShA, ShB2	Shadeland silt loam, 0 to 2 percent slopes	ShB	Shadeland silt loam, 1 to 4 percent slopes
SoA, SoB	Sleeth silt loam, 0 to 2 percent slopes	SmA	Sleeth loam, 0 to 2 percent slopes
Sp, Se	Sloan silty clay loam, occasionally flooded	Sn	Sloan clay loam, occasionally flooded
So	Millsdale Variant silty clay loam, occasionally flooded	So	Sloan Variant silty clay loam, occasionally flooded
SrB, SrB2, AhB, AhB2	Sparta loamy sand, 2 to 6 percent slopes	SrB	Sparta sand, 2 to 6 percent slopes
SrC, SrC2, AhC, AhC2, SrD2, SrD	Sparta loamy sand, 6 to 12 percent slopes	SrC	Sparta sand, 6 to 12 percent slopes
SzC2, PrC2, AsC, AsC2, AtC, SzC, AtC2	Spinks fine sand, 6 to 12 percent slopes, eroded	StC	Spinks fine sand, 6 to 12 percent slopes
QtA, Ss, FbA, KeA	Starks-Fincastle silt loams, 0 to 2 percent slopes	SWA	Starks-Fincastle complex, 0 to 2 percent slopes
HeF, HkF, MsE2, MsE	Strawn-Rodman complex, 18 to 60 percent slopes	SyF	Strawn-Rodman complex, 18 to 50 percent slopes

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
PxA, PpA	Proctor Variant silt loam, 0 to 2 percent slopes	TbA	Tecumseh silt loam, 0 to 2 percent slopes
OdA, RxA, RzA	Ockley Variant silt loam, 0 to 2 percent slopes	TcA	Thackery silt loam, 0 to 2 percent slopes
HbA, XnA, PwA, PoA, OmA, WxA, WxB2, HbB, HbB2	Harvard silt loam, moderately wet, 0 to 2 percent slopes	TfB	Throckmorton silt loam, 1 to 3 percent slopes
Tg	Tice silt loam, frequently flooded	Tg	Tice silty clay loam, frequently flooded
TmA, MvA, TiA, CuA	Toronto-Millbrook silt loams, 0 to 2 percent slopes	TmA	Toronto-Millbrook complex, 0 to 2 percent slopes
TnB2, OnB2, XnB2, XnB, TmB, TmB2, TnB	Toronto-Octagon silt loams, 2 to 6 percent slopes, eroded	TnB2	Toronto-Octagon complex, 2 to 6 percent slopes, eroded
TtA, Tt, Tu, TuA	Troxel silt loam, 0 to 2 percent slopes	TtA	Troxel silt loam, 0 to 2 percent slopes
Ud, Ue, Cf	Udorthents	Ua	Udorthents, loamy
UIB, UIC, UWB, UoC, UoB, UeB	Urban land-Billett gravelly substratum complex, 2 to 8 percent slopes	UeB	Urban land-Billett complex, 2 to 8 percent slopes
UWA, UoA, UIA, UcA, UIA	Urban land-Wea complex, 0 to 2 percent slopes	UcA	Urban land-Carmi complex, 0 to 2 percent slopes
UmB, UrB, UfB	Urban land-Miami complex, 2 to 8 percent slopes	UmB	Urban land-Miami complex, 2 to 8 percent slopes
UmC	Urban land-Miami complex, 8 to 15 percent slopes	UmC	Urban land-Miami complex, 8 to 15 percent slopes

TIPPECANOE COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
UfA	Urban land-Fincastle complex, 0 to 2 percent slopes	UsA	Urban land-Starks-Fincastle complex, 0 to 2 percent slopes
W	Water	W	Water
Xt, WaM, Wa	Wallkill Variant silt loam	Wb	Wallkill silt loam, coprogenous earth substratum
We, Sm	Washtenaw silt loam	We	Washtenaw silt loam
WgA, WoA	Waupecan silt loam, 0 to 2 percent slopes	WgA	Waupecan silt loam, 0 to 2 percent slopes
YwA, WhA	Waupecan silt loam, moderately wet, 0 to 2 percent slopes	WhA	Waupecan silt loam, moderately wet, 0 to 2 percent slopes
WmA	Waynetown silt loam, 0 to 2 percent slopes	WmA	Waynetown silt loam, 0 to 2 percent slopes
WtA, Rv	Ross silt loam, occasionally flooded	WtA	Mea silt loam, occasionally flooded
WuA, WuT, Ws, Wu, RnA	Whitaker silt loam, 0 to 2 percent slopes	WuA	Whitaker loam, till substratum, 0 to 2 percent slopes

Series Established by this Correlation:

Battleground, type location in Tippecanoe County
Desker, type location in Tippecanoe County
Lash, type location in Tippecanoe County
Lauramie, type location in Tippecanoe County
Marker, type location in Tippecanoe County
Mulvey, type location in Tippecanoe County
Ouiatenon, type location in Tippecanoe County,
Pinevillage, type location in Tippecanoe County
Richardville, type location in Tippecanoe County
Sawabash, type location in Tippecanoe County
Tecumseh, type location in Tippecanoe County
Throckmorton, type location in Tippecanoe County

Series dropped or made Inactive

None

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

Prior Soil Survey Publications:

A prior soil survey was made for Tippecanoe County, Indiana, in 1959. 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 Tippecanoe County was published by the U.S. Department of Agriculture in 1959. (Reference citation, see below). This survey updates the 1959 survey, provides a more detailed soil survey on aerial photography, and contains more interpretative information."

Soil Survey of Tippecanoe County, Indiana. By H.P. Ulrich, in charge, T.E. Barnes, and B.A. Krantz, Purdue University Agricultural Experiment Station, and J.G. Wade, Soil Conservation Service, United States Department of Agriculture, 117 pages, illus. 1959.

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 1988. Map compilation and finishing is being done by the party leader. Federal, State, and certain county roads will be named. County roads which are on section lines will be named using the latest map supplied by the Tippecanoe County Highway Department.

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

Soil Survey Area: Tippecanoe
State: Indiana

Date: 8/89 BH

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
CULTURAL FEATURES		CULTURAL FEATURES (cont.)		SPECIAL SYMBOLS FOR SOIL SURVEY	
BOUNDARIES		MISCELLANEOUS CULTURAL FEATURES		SOIL DELINEATIONS AND SOIL SYMBOLS	
County or parish		Farmstead, house (omit in urban areas)		ESCARPMENTS	
Minor civil division		Church		Bedrock (points down slope)	
Reservation (national forest or park, state forest or park, and large airport)		School		SHORT STEEP SLOPE	
Field sheet matchline & neatline		WATER FEATURES		MISCELLANEOUS	
AD HOC BOUNDARY (label)		DRAINAGE		Gravelly spot	
Small airport, airfield, park, oilfield, cemetery, or flood pool		Perennial, double line		Sandy spot	
STATE COORDINATE TICK 1 890 000 FEET		Perennial, single line		Severely eroded spot	
LAND DIVISION CORNERS (sections and land grants)		Intermittent		RECOMMENDED AD HOC SOIL SYMBOLS	
ROADS		Drainage end		Overwash spot	
Divided (median shown if scale permits)		Canals or ditches		Muck spot	
County, farm or ranch		LAKES, PONDS AND RESERVOIRS		Landfill	
ROAD EMBLEMS & DESIGNATIONS		Perennial		Calcareous spot	
Interstate		MISCELLANEOUS WATER FEATURES		Siltstone at 40-60 inches	
Federal		Marsh or swamp		Black shale at 20-40 inches	
State					
Other					
RAILROAD					
LEVEES					
Without road					
DAMS					
Medium or small					
PITS					
Gravel pit					
Mine or quarry					

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
Am	Allison silt loam, protected
Ap	Allison silt loam, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
AtB2	Alvin-Spinks complex, 2 to 6 percent slopes, eroded
Ba	Battleground silt loam, protected
Bb	Battleground silt loam, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
BgA	Beecher silt loam, 0 to 2 percent slopes (where drained)
BIA	Billett fine sandy loam, gravelly substratum, 0 to 2 percent slopes
BIB2	Billett fine sandy loam, gravelly substratum, 2 to 6 percent slopes, eroded
BmA	Billett fine sandy loam, moderately wet, 0 to 2 percent slopes
BnA	Billett loam, gravelly substratum, 0 to 2 percent slopes
BnB2	Billett loam, gravelly substratum, 2 to 6 percent slopes, eroded
BoA	Bowes silt loam, 0 to 2 percent slopes
BpA	Bowes Variant silt loam, 0 to 2 percent slopes
CaA	Camden silt loam, 0 to 2 percent slopes
CfB	Carmi sandy loam, 2 to 6 percent slopes
CgA	Carmi loam, 0 to 2 percent slopes
Ck	Ceresco sandy loam, gravelly substratum, rarely flooded (where drained)
Cl	Ceresco loam, gravelly substratum, occasionally flooded (where drained)
Cm	Chalmers silty clay loam (where drained)
Co	Cohoctah fine sandy loam, gravelly substratum, rarely flooded (where drained)
Cp	Cohoctah loam, gravelly substratum, occasionally flooded (where drained)
CtA	Crosby silt loam, 0 to 2 percent slopes (where drained)
CWB2	Crosby-Miami complex, 2 to 6 percent slopes, eroded (where drained)

SOIL SURVEY TIPPECANOE COUNTY, INDIANA

PRIME FARMLAND--Continued

Map symbol	Soil name
Du	Drummer soils (where drained)
Dy	Du Page loam, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
EkA	Elston sandy loam, gravelly substratum, 0 to 2 percent slopes
EmA	Elston loam, gravelly substratum, 0 to 2 percent slopes
FcB	Fincastle-Crosby complex, 1 to 3 percent slopes (where drained)
HfB2	High Gap Variant silt loam, 1 to 6 percent slopes, eroded
KaA	Kalamazoo loam, 0 to 2 percent slopes
KaB2	Kalamazoo loam, 2 to 6 percent slopes, eroded
KbB2	Kalamazoo silt loam, 2 to 6 percent slopes, eroded
KcB2	Kalamazoo silt loam, kame, 2 to 6 percent slopes, eroded
LaA	Lafayette silt loam, 0 to 2 percent slopes (where drained)
LeA	La Hogue loam, till substratum, 0 to 2 percent slopes (where drained)
Lm	Lash silt loam, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
LnA	Lauramie silt loam, 0 to 2 percent slopes
LnB2	Lauramie silt loam, 2 to 6 percent slopes, eroded
LoA	Linkville loam, loamy substratum, 0 to 2 percent slopes
LoB	Linkville loam, loamy substratum, 2 to 6 percent slopes
LvB2	Longlois silt loam, 2 to 6 percent slopes, eroded
LwB2	Longlois silt loam, kame, 2 to 6 percent slopes, eroded
Mb	Mahalasville silty clay loam, gravelly substratum (where drained)
Mc	Mahalasville silty clay loam, shale substratum (where drained)
Md	Mahalasville-Treaty complex (where drained)
MmB2	Marker silt loam, 2 to 6 percent slopes, eroded
MoA	Mellott silt loam, 0 to 2 percent slopes
MwA	Mulvey silt loam, 0 to 2 percent slopes (where drained)
OgA	Ockley silt loam, 0 to 2 percent slopes
Omb2	Octagon silt loam, 2 to 6 percent slopes, eroded
RaB2	Rainsville silt loam, 2 to 6 percent slopes, eroded
RcA	Raub-Brenton complex, 0 to 1 percent slopes (where drained)
RdA	Richardville silt loam, 0 to 2 percent slopes
RdB2	Richardville silt loam, 2 to 6 percent slopes, eroded

PRIME FARMLAND--Continued

Map symbol	Soil name
RoB	Rockfield silt loam, 1 to 3 percent slopes
Rz	Ross silt loam, protected
Sd	Saranac silty clay loam, gravelly substratum, occasionally flooded (where drained)
Sf	Sawabash silty clay loam, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
ShB	Shadeland silt loam, 1 to 4 percent slopes (where drained)
SmA	Sleeth loam, 0 to 2 percent slopes (where drained)
Sn	Sloan clay loam, occasionally flooded (where drained)
So	Sloan Variant silty clay loam, occasionally flooded (where drained)
SWA	Starks-Fincastle complex, 0 to 2 percent slopes (where drained)
TbA	Tecumseh silt loam, 0 to 2 percent slopes
TcA	Thackery silt loam, 0 to 2 percent slopes
TfB	Throckmorton silt loam, 1 to 3 percent slopes
Tg	Tice silty clay loam, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
TmA	Toronto-Millbrook complex, 0 to 2 percent slopes (where drained)
TnB2	Toronto-Octagon complex, 2 to 6 percent slopes, eroded (where drained)
TtA	Troxel silt loam, 0 to 2 percent slopes
We	Washtenaw silt loam (where drained)
WgA	Waupecan silt loam, 0 to 2 percent slopes
WhA	Waupecan silt loam, moderately wet, 0 to 2 percent slopes
WmA	Waynetown silt loam, 0 to 2 percent slopes (where drained)
WtA	Wea silt loam, occasionally flooded
WuA	Whitaker loam, till substratum, 0 to 2 percent slopes (where drained)

Certifications

1. Mapping was completed December 1986.
2. The General Soils Map has been joined to the maps of the following soil surveys in Indiana.
 - a. Clinton County (Correlated in 1978)
 - b. Carroll County (Correlated in 1987)
 - c. Montgomery County (Correlated in 1984)
 - d. Fountain County (Correlated in 1964)
 - e. Warren County (Correlated in 1987)
 - f. Benton County (Correlated in 1985)
 - g. White County (Correlated in 1979)

A thorough attempt was made to join lines and names except Fountain County. Names and concepts have changed considerably since the correlation of Fountain County. It was better to draw the lines correctly in Tippecanoe County than to erroneously draw lines so they would join. Lines do not join with Montgomery, White, and Warren Counties because separate units were delineated in Tippecanoe County for Intergrades and Prairie soil regions. These areas were not separated on the Montgomery, White and Warren General Soil Map because of limited acreage. The names of map units have some differences because of changes in the proportion of soils within the map units. Recent lab data accounted for some series name differences from the adjoining counties; however, the use, management, and interpretation of these soils have no significant differences. A detailed account of the General Soils Map joins is on file in the state office.

3. A thorough attempt was made to join detailed soil survey maps in all counties except Fountain County. Some differences in soil names and map unit composition exist because of map scale, legend design, and recent laboratory and transect data. 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: Hd, Co, Cp, Pg, Pk, Rz and Sn.
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
Bobby J. Ward

3-6-70
Date

CONVERSION LEGEND FOR
TIPPECANOE COUNTY, INDIANA

Field symbol	Publi- cation symbol						
AbM	Ox	BoB	LvB2	CpC2	CrC	EiA	RcA
AcM	Ox	BoB2	LvB2	CpD	CrC	EkA	EkA
Ad	Ck	BpA	BpA	CpD2	CrC	EmA	EmA
Ag	Pc	BrB2	HnB	Cr	Cp	EsA	EkA
AhA	HoA	BrC	KpC3	CrC2	CrC	EsC	DmC2
AhB	SrB	BrC2	KpC3	CsB	AtB2	EsC2	DmC2
AhB2	SrB	BsB3	HnB	CsC	CrC	EtA	EkA
AhC	SrC	BsC3	KpC3	CuA	TmA	FaA	PmB
AhC2	SrC	BvA	RcA	CvA	RoB	FaB	PmB
Ak	Pd	BwA	LaA	CvB	CwB2	FaC	PmB
Am	Am	By	Md	CvB2	CwB2	FaD	PmB
Ap	Ap	BzA	RcA	CwB	CwB2	FbA	SwA
ApP	Am	CaA	CaA	Cy	Ck	FcA	FcB
Ar	Ap	CaB	RdB2	CzA	CtA	FeB	CwB2
AsC	StC	CaB2	RdB2	CzB	CwB2	FeB2	CwB2
AsC2	StC	CbA	HoA	CzB2	CwB2	Fi	BmA
AtA	KaA	CbB	HnB	De	LeA	FiA	BmA
AtB	AtB2	CbB2	HnB	Di	LeA	FnA	BmA
AtB2	AtB2	CbC	KpC3	DmC3	DoC2	FoA	BmA
AtC	StC	CbC2	KpC3	DmD2	DpD2	FrB	KcB2
AtC2	StC	CdC3	KpC3	DnD	DpD2	FrB2	KcB2
Au	Ba	CeB	LwB2	DrB	LwB2	FrC	KcC2
Av	Du	CeB2	LwB2	DrB2	LwB2	FrC2	KcC2
Aw	Bb	CeC2	DoC2	DrC2	DoC2	FrC3	KcC2
AwP	Ba	CeC3	DoC2	DrD2	DpD2	FrD	KoD2
BcA	BoA	CeD2	DpD2	DrD3	DpD2	FrD2	KoD2
Be	Cl	CeD3	DpD2	DsC3	DoC2	FrD3	KoD2
BfF	BkF	Cf	Ua	DsD	DpD2	FsA	KaA
BgA	BgA	CfA	EkA	DtB2	BnB2	FsB	KaB2
BkF	BkF	CfB	CfB	DtC	DmC2	FsB2	KaB2
BIA	BIA	CfB2	CfB	DtC2	DmC2	FsC2	KpC3
BIB2	BIB2	Cg	Cl	DtC3	DmC2	FsD	KoD2
BmA	BIA	CgA	CgA	DtD	DpD2	FsD2	KoD2
BmB	BIB2	Ch	Cl	DtD2	DpD2	FtC2	KpC3
BmB2	BIB2	Ck	Ck	DtD3	DpD2	FtC3	KpC3
BmC	DmC2	Cn	Cm	Du	Du	FuB3	KbB2
BmC2	DmC2	CpA	AtB2	DuS	Du	FuC3	KpC3
BmD3	DpD2	CpB	AtB2	Dw	Du	FuD	KoD2
BnA	BgA	CpB2	AtB2	Dy	Dy	FuD2	KoD2
BoA	BoA	CpC	CrC	Ef	Cl	Ge	Ox

TIPPECANOE COUNTY, INDIANA --Continued

Field symbol	Publication symbol						
GeD	Lm	HoA	HoA	LsC2	DmC2	Mm	Cl
GeD	Lm	HoB	HnB	LtB	LwB2	Mn	Ck
GeM	Ox	HoB2	HnB	LtB2	LwB2	MoA	MoA
Gf	Lm	Hp	Hd	LtB3	LwB2	MoD	MsD2
GnB	CwB2	Ht	Mz	LtC2	DoC2	MoD2	MsD2
GnB2	CwB2	Hv	Hv	LtC3	DoC2	MpA	RdA
GnC	MsC2	Hw	Am	LtD2	DpD2	MpB	RdB2
GnC2	MsC2	JaA	LoA	LtD3	DpD2	MpB2	RdB2
GnC3	MtC3	JaB	LoB	LuA	BoA	MpC	RdC2
GnD	MsD2	JbA	LnA	LuB	LvB2	MpC2	RdC2
GnD2	MsD2	JbB	LnB2	LuB2	LvB2	MpC3	RdC2
GnD3	MtD3	JbB2	LnB2	LuC	DmC2	MsA	RoB
Gp	Pt	JbC	DmC2	LuC2	DmC2	MsB	CwB2
GtB	OaB2	JbC2	DmC2	LvA	BoA	MsB2	CwB2
GtB2	OaB2	JbC3	OpC3	Ma	Md	MsC	MsC2
HbA	TfB	JbD	MsD2	Mb	Mb	MsC2	MsC2
HbB	TfB	JbD2	MsD2	Mc	Mc	MsD	MsD2
HbB2	TfB	KaA	KaA	McA	MmB2	MsD2	MsD2
HcA	MoA	KaB2	KaB2	McB	MmB2	MsE	SyF
HcB	LnB2	KeA	SwA	McB2	MmB2	MsE2	SyF
HcB2	LnB2	KpC3	KpC3	McB3	MmB2	MtC	MsC2
HcC	OmC2	Lb	Ou	McC	OmC2	MtC3	MtC3
HcC2	OmC2	LbW	Lm	McC2	OmC2	MtD3	MtD3
Hd	Hd	Lc	Ox	McC3	OpC3	Mu	Mu
HeF	SyF	LcW	Oy	MdA	RdA	Mv	Mc
HfA	HfB2	Ld	Ox	MdB	RdB2	MvA	TmA
HfB	HfB2	Lg	Ox	MdB2	RdB2	MvA	MvA
HfB2	HfB2	Lh	Ox	MdC	RdC2	My	Mc
HfC	HfC2	Lk	Oy	MdC2	RdC2	Nm	Bb
HfC2	HfC2	Lm	Lm	MdC3	RdC2	OcA	BmA
HfC3	HfC2	LnC2	OmC2	MfA	RdA	OdA	TcA
HfD	HfC2	LrA	BnA	MfB	RdB2	OdB	CwB2
HfD2	HfC2	LrB	BnB2	MfB2	RdB2	OdB2	CwB2
HfD3	HfC2	LrB2	BnB2	MfC	RdC2	OeB	KcB2
HfF	BkF	LrC	DmC2	MfC2	RdC2	OeB2	KcB2
HgC3	HfC2	LrC2	DmC2	MfC3	RdC2	OeC	KcC2
HkF	SyF	LsA	BnA	MfD2	MsD2	OeC2	KcC2
HnA	HoA	LsB	BnB2	MfD3	MtD3	OeC3	KcC2
HnB	HnB	LsB2	BnB2	Mg	Pc	OeD	KoD2
Ho	Ck	LsC	DmC2	MI	Cl	OeD2	KoD2

TIPPECANOE COUNTY, INDIANA --Continued

Field symbol	Publication symbol						
QeD3	KoD2	Qu	Qu	QIA	Ck	SrB2	SrB
QfA	KaA	Qw	Ox	Qm	Sf	SrC	SrC
QfB	KaB2	QxA	HoA	QmA	Sf	SrC2	SrC
QfB2	KaB2	QxB	HnB	QtA	SwA	SrD	SrC
QfC	KpC3	QxB2	HnB	RaB2	RaB2	SrD2	SrC
QfC2	KpC3	QxC	KpC3	Rh	Md	Ss	SwA
QfC3	KpC3	QxC2	KpC3	RkA	RdA	Sw	Ox
QgA	QgA	QxC3	KpC3	RkB	RdB2	Sy	Co
QgB	KbB2	Qy	Qy	RkB2	RdB2	SzB	AtB2
QgB2	KbB2	PaB	PmB	RkC	RdC2	SzB2	AtB2
QgC	KpC3	Pc	Pc	RkC2	RdC2	SzC	StC
QgC2	KpC3	PcB	Pc	RkC3	RdC2	SzC2	StC
QgC3	KpC3	PcC	OmC2	RnA	WuA	Tg	Tg
QgD	KoD2	PcC2	OmC2	RoB	RoB	TiA	TmA
QgD2	KoD2	PcD	MsD2	RpA	Ck	TmA	TmA
QhB	KcB2	PeB	OmB2	RsF	RsF	TmB	TnB2
QhB2	KcB2	PeB2	OmB2	Rt	Dy	TmB2	TnB2
QhC	KcC2	PeC	OmC2	RtP	Rz	TnB	TnB2
QhC2	KcC2	PeC2	OmC2	Ru	Dy	TnB2	TnB2
QhC3	KcC2	PeD	MsD2	Rv	WtA	To	Pd
QhD	KoD2	PeD2	MsD2	RwA	QgA	Tr	Md
QhD2	KoD2	Pg	Pg	RwB2	KbB2	Tt	TtA
QhD3	KoD2	Ph	Mb	RxA	TcA	TtA	TtA
QkC3	KpC3	Pk	Pk	RzA	TcA	Tu	TtA
QmA	TfB	PmB	PmB	Sd	Sd	TuA	TtA
QmB	OmB2	PnB	AtB2	Se	Sn	UdB	UdB
QmB2	OmB2	PnC	CrC	ShA	ShB	UcA	UcA
QmC	OmC2	PnC2	CrC	ShB2	ShB	Ud	Ua
QmC2	OmC2	PnD	CrC	SkA	HoA	Ue	Ua
QmC3	OpC3	PnD2	CrC	SkB	HnB	UfA	UsA
QmD	MsD2	PoA	TfB	SkB2	HnB	UfB	UmB
QmD2	MsD2	PoB	LnB2	SkC	KpC3	UjA	UcA
QmD3	MtD3	PoB2	LnB2	Sl	Cl	UjA	UcA
QnB2	TnB2	PpA	TbA	Sm	We	UjB	UdB
QnC3	OpC3	PrA	KaA	So	So	UjC	UdB
OpC3	OpC3	PrB2	AtB2	SoA	SmA	UmB	UmB
OtA	HoA	PrC2	StC	SoB	SmA	UmC	UmC
OtB	HnB	PwA	TfB	Sp	Sn	UoA	UcA
OtB2	HnB	PxA	TbA	SrA	EkA	UoB	UdB
OtC	KpC3	PxB	LnB2	SrB	SrB	UoC	UdB

TIPPECANDE COUNTY, INDIANA --Continued

Field symbol	Publication symbol						
UrB	UmB	WvA	RoB				
UwA	UcA	WvB	CwB2				
UwB	UbB	WvB2	CwB2				
W	W	WxA	TfB				
		WxB2	TfB				
Wa	Wb	XaA	BmA				
WAM	Wb	XaB	AtB2				
We	We	XaB2	AtB2				
WgA	WgA	XkA	RoB				
WgB	LvB2	XkB	RaB2				
WgB2	LvB2	XkB2	RaB2				
WhA	WhA	XnA	TfB				
WmA	WmA	XnB	TnB2				
WnA	EmA	XnB2	TnB2				
WnB	CfB	Xs	Mz				
WnB2	CfB	Xt	Wb				
WnC	DmC2	YfB2	CwB2				
WnF	RsF	Yh	Md				
WoA	WgA	YwA	WhA				
WoB	LvB2						
WoB2	LvB2						
WoC	DmC2						
WoC2	DmC2						
WpB	LwB2						
WpB2	LwB2						
WpC	DoC2						
WpC2	DoC2						
WpD	DpD2						
WpD2	DpD2						
WrB	LwB2						
WrC	DoC2						
WrC2	DoC2						
Ws	WuA						
WsB	CwB2						
WsB2	CwB2						
Wt	Mb						
WtA	WtA						
Wu	WuA						
WuA	WuA						
WuT	WuA						

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS
Tippecanoe County, Indiana

1. Laboratory Data From NSSL

<u>Sampled As</u>	<u>Pedon Sample Number</u>	<u>Approved Publication Symbol</u>	<u>Approved Name or Classification</u>
Mahalasville gravelly substratum	S83IN-157-001	Mb	Mahalasville, gravelly substratum.
Waupecan	S83IN-157-002	WgA	<u>1/</u> Waupecan
Drummer	S83IN-157-003	Du	<u>1/</u> Drummer; Solum deeper than series range.
Miami	S84IN-157-022	MtC3	Miami; Bulk density for Bt and C horizons only. PSD from Purdue Lab. Gray mottles in the 2Bct outside series range.
Miami	S84IN-157-002	MsC2	Miami; Bulk density for Bt and C horizons only. PSD from Purdue Lab. Lower part of Bt and C horizons contain more sand than series range.
Longlois	S85IN-157-001	BnA	<u>1/</u> Billett
Wea	S85IN-157-002	EmA	<u>1/</u> Elston taxadjunct; no argillic. Typic Hapludoll, coarse-loamy, mixed, mesic.
Markham	S85IN-157-009	McB2	<u>1/</u> Marker <u>2/</u>

1/ Representative pedon for the series in Tippecanoe County.

2/ Type location for the series.

Tippecanoe County, Indiana

2. Laboratory Data From Purdue University

<u>Sampled As</u>	<u>Pedon Sample Number</u>	<u>Approved Publication Symbol</u>	<u>Approved Name or Classification</u>
Miami	S69IN-79-1	CwB2	Miami; C horizon and 2Bt has more clay than series range.
Miami	S69IN-79-2	CwB2	Miami; C horizon has more sand than series range.
Ockley	S72IN-79-1	OgA	Ockley
Ockley	S76IN-157-1	BnA	Ockley; inclusion in mapping unit.
Miami	S83IN-157-1	CwB2	Miami; fine sandy loam C horizon outside series range.
Chalmers	S84IN-157-4	Cm	Chalmers
Xenia	S84IN-157-11	RoB	Xenia; inclusion in map unit.
Fincastle	S84IN-157-12	SwA	<u>1/</u> Fincastle
Camden	S84IN-157-13	CaA	<u>1/</u> Camden
Chalmers	S84IN-157-14	Cm	<u>1</u> Chalmers
Brenton Variant	S84IN-157-15	LaA	<u>1/</u> Lafayette taxadjunct; Aquic Argiudoll, fine, mixed, mesic.
Rodman	S84IN-157-16	SyF	<u>1/</u> Rodman taxadjunct; Entic Hapludoll, sandy-skeletal, mixed, mesic. Carbonates in all horizons.
Strawn	S84IN-157-17	SyF	<u>1/</u> Strawn
Landes Variant	S84IN-157-18	Ou	Fluventic Hapludoll, coarse-loamy over sandy, mixed, mesic; inclusion in mapping unit.

1/ Representative pedon for the series in Tippecanoe County.

Tippecanoe County, Indiana

2. Laboratory Data From Purdue University (Cont.)

<u>Sampled As</u>	<u>Pedon Sample Number</u>	<u>Approved Publication Symbol</u>	<u>Approved Name or Classification</u>
Martinsville Variant	S84IN-157-30	RdA	<u>1/ 2/</u> Richardville.
Saranac	S84IN-57-31	Sd	<u>1/</u> Saranac
Toronto	S84IN-157-32	TmA	<u>1/</u> Toronto taxadjunct; high clay content; Udollic Ochraqualf; fine, mixed, mesic.
Millbrook	S84IN-157-33	TmA	<u>1/</u> Millbrook
Treaty	S84IN-157-34	Md	<u>1/</u> Treaty; slightly more clay in Bt than series range. Classification not affected.
Raub	S85IN-157-2	RcA	Raub; solum thickness less than series range.
Ceresco	S85IN-157-7	Cl	<u>1/</u> Ceresco
Sloan	S85IN-157-19	Sn	<u>1/</u> Sloan
Landes Variant	S85IN-157-20	Ou	<u>1/ 2/</u> Ouiatenon
Milford	S85IN-157-21	Mu	<u>1/</u> Milford
Coloma	S85IN-157-23	CrC	<u>1/</u> Coloma; lamellae at shallower depth than series range.
Peotone	S85IN-157-24	Pk	<u>1/</u> Peotone
Beecher	S85IN-157-25	BgA	<u>1/</u> Beecher
Fincastle	S85IN-157-38	SwA	Fincastle; silty portion too thick, silt loam till.

1/ Representative pedon for the series in Tippecanoe
2/ Type location for the series.

Tippecanoe County, Indiana

<u>Sampled As</u>	<u>Pedon Sample Number</u>	<u>Approved Publication Symbol</u>	<u>Approved Name or Classification</u>
Mahalasville	S84IN-157-19	Md	Pella; inclusion in map unit.
Octagon	S84IN-157-20	OmB2	1/Octagon; -
Starks	S84IN-157-21	SwA	<u>1/</u> Starks
Miami	S84IN-157-22	MtC3	Miami; gray mottles in the lower B horizon outside series range.
Miami	S84IN-157-23	MsC2	Miami; fsl in the C horizon outside series range.
Miami	S84IN-157-24	CwB2	<u>1/</u> Miami; scl in the Bt and <u>sl</u> in the C horizon outside series range. Upper Bt more acid than series range.
Bowes	S84IN-157-25	BoA	<u>1/</u> Bowes; Upper 2Bt contains less gravel than series range.
Carmi	S84IN-157-26	HoA	<u>1/</u> Hononegah taxadjunct; Typic Hapludoll, sandy, mixed, mesic. Has a cambic horizon.
Cohoctah	S84IN-157-27	Co	<u>1/</u> Cohoctah; "B" horizon recognized in this pedon.
Jasper Variant	S84IN-157-28	LnA	<u>1/</u> <u>2/</u> Lauramie
Pella	S84IN-157-29	Pg	<u>1/</u> Pella; solum does not extend into the loamy outwash as required in series range.

1/ Representative pedon for the series in Tippecanoe County.

2/ Type location for the series.

<u>Sampled As</u>	<u>Pedon Sample Number</u>	<u>Approved Publication Symbol</u>	<u>Approved Name or Classification</u>
Russell	S85IN-157-40	RoB	Russell; inclusion in map unit.
Ockley	S86IN-157-1	OgA	<u>1</u> /Ockley
Troxel	S86IN-157-2	T1A	<u>1</u> /Troxel taxadjunct; no argillic. Cumulic Hapludoll, fine, mixed, mesic.
Sawmill Variant	S86IN-157-4	St	<u>1</u> / <u>2</u> / Sawabash
Tice	S86IN-157-5	Tg	<u>1</u> /Tice taxadjunct; high clay content. Fluvaquentic Hapludoll, Fine, mixed, mesic.
Armiesburg Variant	S86IN-157-6	Bb	<u>1</u> / <u>2</u> / Battleground
Harvard Variant	S86IN-157-7	MoA	<u>1</u> / <u>2</u> / Mellott
Dresden	S86IN-157-9	DmC2	<u>1</u> / <u>2</u> / Desker
Longlois	S86IN-157-10	LvB2	<u>1</u> / <u>2</u> / Longlois
Kalamazoo	S86IN-157-11	KaA	<u>1</u> / Kalamazoo
Carmi	S86IN-157-12	EkA	Elston taxadjunct; high clay content. Fine-loamy, mixed, mesic, Type Argiudoll.
Raub	S86IN-157-13	RcA	<u>1</u> /Raub

3. Engineering test data for pedons tested by the State Highway Department of Indiana, Division of Materials and Tests.

<u>Sampled As</u>	<u>Pedon Sample Number</u>	<u>Recommended Publication Symbol</u>	<u>Approved Name or Classification</u>
Waupecan	S83IN-157-2	WgA	<u>1</u> /Waupecan; gravel content in lower 2Bt horizon less than series range.

1/ Representative pedon for the series in Tippecanoe County

2/ Type location for the series.

3. Engineering test data for pedons tested by the State Highway
Department of Indiana, Division of Materials and Tests. (cont.)

<u>Sampled As</u>	<u>Pedon Sample Number</u>	<u>Recommended Publication Symbol</u>	<u>Approved Name or Classification</u>
Drummer	S83IN-157-3	Du	1/Drummer; chroma of 6 "B" outside series range. Solum deeper than series range.
Mahalasville	S84IN-157-19	Md	Pella; inclusion in map unit
Millbrook	S84IN-157-33	TmA	1/Millbrook

4. Partial Pedon Laboratory Data From NSSL

<u>Sampled As</u>	<u>Pedon Sample Number</u>	<u>Publication Symbol</u>	<u>Approved Name</u>
Millbrook till substratum	S85IN-157-003-6	RcA	Raub (till sample only)
Toronto	S85IN-157-004-6	RcA	Raub (till sample only)
Toronto	S85IN-157-005-7	RcA	Raub (till sample only)
Camden Variant	S85IN-157-006-9	RoB	Rockfield (till sample only)
Harvard Till substratum	S85IN-157-007-7	TfB	Throckmorton (till sample only)
Harvard till substratum	S85IN-157-008-7	TfB	Throckmorton (till sample only)
Markham Variant	S85IN-157-010-5	MmB2	Marker (till sample only)
Markham Variant	S85IN-157-011-5	MmB2	Marker (till sample only)
Raub	S85IN-157-012-1	RcA	Raub (surface sample only)
Millbrook	S85IN-157-03-1	RcA	Brenton (surface sample only)
Millbrook	S85IN-157-015-1	TmA	Millbrook (surface sample only)
Toronto	S85IN-157-015-1	TmA	Toronto (surface sample only)

NOTES ON
CLASSIFICATION AND CORRELATION
OF THE SOILS OF
TIPPECANOE COUNTY, INDIANA

BY

BILL HOSTETER AND ROGER HABERMAN

ALLISON SERIES

These soils are more alkaline than the series range.

ALVIN SERIES

The solum is thicker than the series range.

BATTLEGROUND SERIES

This series is established by this correlation. Classification is fine-silty, mixed, mesic Fluventic Hapludoll.

BEECHER SERIES

These soils have a thicker silt cap than is allowed for the series.

BILLETT SERIES

The upper part of the Bt horizon in map units BnA and BnB2 contains less sand than the series range. All map units in this county contain carbonates above a depth of 60 inches and are moderately alkaline in the C horizon. Map units B1B2 and BnB2 contain more gravel in the lower part of the B horizon than the series range. Map units B1A, B1B2, BnA and BnB2 are correlated as gravelly substratum phase because the substratum is sand and gravelly sand. Classification is not affected in any of these map units.

BOWES SERIES

The upper part of the 2Bt horizon contains less gravel than the series range.

BOWES VARIANT

These soils formed in silty material and gravelly loamy outwash. Classification is fine-silty, mixed, mesic Mollic Hapludalf.

CAMDEN SERIES

These soils have a slightly thicker 2Bt horizon than the series range.

CERESCO SERIES

The depth to sand and gravelly sand is less than 40 inches in map unit CL but the gravelly substratum modifier was used. The A horizon is more acid than the series range.

COHOCTAH SERIES

A B horizon is recognized in this soil. Map units Co and Cp are correlated as gravelly substratum phases because the substratum is sand and gravelly sand. Map units Co and Cp are assigned capability class 3w so that they are consistent with other very poorly drained soils on narrow floodplains.

COLOMA SERIES

The solum is thicker than the series range.

CROSBY SERIES

These soils are taxadjuncts because they have less clay in the control section (field estimate 32%) than the series range. Classification is fine-loamy, mixed, mesic Aeric Ochraqualf. Interpretations for Crosby are suitable.

DESKER SERIES

This series is established by this correlation. Classification is coarse-loamy, mixed, mesic, Mollic Hapudalf.

DRUMMER SERIES

The solum is thicker than the series range.

ELSTON SERIES

These soils are taxadjuncts because they do not have sufficient clay increase for an argillic horizon. Classification is coarse-loamy, mixed, mesic Typic Hapludolls.

Map unit EkA has a gravelly subhorizon in the Bt which is outside the series range. Map units EkA and EmA are correlated as gravelly substratums because the substratum is sand and gravelly substratum.

HARPSTER SERIES This map unit is in low lying potholes which are difficult to adequately drain. Capability class 4w is assigned for this reason.

HIGH GAP VARIANT

These soils formed in silty material, loamy drift, and shale residuum. Classification is fine-loamy, mixed, mesic Ultic Hapludalf.

HONONEGAH SERIES

The solum is slightly thicker than the series range.

KALAMAZOO SERIES

The soils in map unit Kbb2 contain more silt and less sand in the upper part of the Bt horizon than the series range. Classification is not affected.

LAFAYETTE SERIES

These soils are taxadjuncts because they contain slightly more clay in the control section (lab value 38%) than the series range. Classification is fine, mixed, mesic Aquic Argiudoll. Interpretations for Lafayette are suitable.

LA HOGUE SERIES

A till substratum phase is correlated because till is above a depth of 60 inches.

LASH

This series is established by this correlation. It formed in loamy calcareous alluvium. It is calcareous in all horizons. Classification is coarse-loamy, mixed, mesic Fluventic Hapludoll.

LAURAMIE SERIES

This series is established by this correlation. These soils formed in silty material and the underlying loamy glaciofluvium and glacial till. Classification is fine-loamy, mixed, mesic Mollic Hapludalf.

LINKVILLE SERIES

A loamy substratum phase is correlated in map units LoA and LoB because the substratum is loam till and is not a source of sand and gravel.

MAHALASVILLE SERIES

Map unit Mb is correlated as a gravelly substratum phase because sand and gravelly sand are above a depth of 60 inches. Map unit Mc is correlated as a shale substratum phase since shale is above a depth of 60 inches.

MARKER SERIES

This series is established by this correlation. It formed in glacial till containing between 24 and 27 percent clay. Classification is fine-loamy, mixed, mesic Aquollic Hapludalfs.

MELLOTT SERIES

The concept of this series is changed to one formed in 24 to 40 inches of silty material and the underlying loamy outwash and friable till from one formed in silty material and firm till.

MIAMI SERIES

The lower part of the solum and the underlying material contains slightly more sand than the series range.

MILFORD SERIES

Map unit Mu is correlated as a pothole phase because it is in low lying potholes which are difficult to adequately drain. Capability class 4w is assigned.

MULVEY

This series is established by this correlation. These soils formed in silty material and loamy and gravelly loamy outwash. Classification is fine-silty, mixed, mesic Udollic Ochraqualf.

OAKVILLE SERIES

These soils have a thicker sola and stronger development than the series range. Coatings are recognized to 80 inches. Classification is not affected.

QUIATENON SERIES

This series is established by this correlation. It formed in calcareous sandy alluvium. Classification is sandy, mixed, mesic Fluventic Hapludolls. Map unit Oy is correlated as a sandy substratum phase because it is not a source of gravel.

PALMS SERIES

The soils in map unit Pd are taxadjuncts to the series in that they are sandy-skeletal in the underlying material. In addition, they are calcareous throughout. Classification is sandy-skeletal, mixed euc, mesic Terric Medisaprist. A gravelly substratum SIR is assigned to map unit Pd because the underlying material is a source of sand and gravel.

PELLA SERIES

The solum does not extend into the loamy outwash as required in the series range. Map unit Pg is correlated as a pothole phase because it is in low lying potholes which are difficult to adequately drain. Capability class 4w is assigned for this reason.

PEOTONE SERIES

Map unit Pk is correlated as a pothole phase because it is in low lying potholes which are difficult to adequately drain. Capability class 4W is assigned for this reason.

PINEVILLAGE SERIES

This series is established by this correlation. This soil formed in calcareous, gravelly, loamy alluvium. Classification is loamy-skeletal, mixed (calcareous), mesic Typic Udifluent.

RICHARDVILLE SERIES

This series is established by this correlation. It formed in silty material and till. Classification is fine-loamy, mixed, mesic Typic Hapludalf.

ROCKFIELD SERIES

This soil has a thicker solum than the series range.

RODMAN SERIES

This soil is a taxadjunct in all map units because all horizons are calcareous. Classification is Entic Hapludolls, sandy-skeletal, mixed, mesic. The lower part of the A horizon is more sandy than the series range. Interpretations for Rodman are suitable.

ROSS SERIES

The solum is thicker than the series range. This soil does not have a water table at 4-6 feet as required on the SIR.

SARANAC SERIES

The solum is thicker than the series range. Map unit Sd is correlated as a gravelly substratum phase because sand and gravelly sand is above a depth of 60 inches.

SAWABASH SERIES

This series is established by this correlation. This soil formed in calcareous silty alluvium. Classification is fine-silty, mixed (calcareous), mesic Cumulic Haplaquolls.

SLOAN SERIES

This soil has a water table above the surface in the winter and early spring.

SLOAN VARIANT

This soil formed in loamy alluvium underlain by bedrock at a depth of 20 to 40 inches. Classification is fine-loamy, mixed, mesic, Fluvaquentic Haplaquolls.

SPARTA SERIES This soil has a mollic epipedon dark enough and thick enough to classify as mollic. It is considered a taxadjunct because of low base status. The pH of the upper part of the solum is consistently less than 5.5. Lab data is not available to document base saturation. However, in surrounding counties where the pH is less than 5.5 and in some cases 6.0, the base saturation is less than 50 percent. This soil also has a few very thin loamy sand bands with a cumulative thickness of less than one inch above a depth of 60 inches. Classification is mixed, mesic, Alfic Udipsamment. Interpretations for Sparta are suitable.

TECUMSEH

This series is established by this correlation. It formed in silty material, glaciofluvium and till. Classification is fine-silty, mixed, mesic Typic Argiudoll.

THACKERY SERIES

The coarse fragments are not dominantly limestone. Igneous rocks dominate.

THROCKMORTON SERIES

This series is established by this correlation. It formed in silty material, glaciofluvium and till. Classification is fine-silty, mixed, mesic Mollic Hapludalf.

TICE SERIES

These soils are taxadjuncts because they contain more clay in the control section (Lab value 41%) than the series range. Classification is Fluventic Hapludolls, fine, mixed, mesic. Interpretations for Tice are suitable.

TORONTO SERIES

These soils are taxadjuncts because they contain more clay in the control section (Lab value 38%) than defined for the series. Classification is Udollic Ochraqualfs, fine, mixed, mesic. Interpretations for Toronto are suitable.

TREATY SERIES

The upper part of the Bt horizon contains more clay than the series range. Classification is not affected.

TROXEL SERIES

These soils are taxadjuncts because they do not have an argillic horizon and also because they contain more clay in the control section than the series range. Classification is fine, mixed, mesic Cumulic Hapludolls. Interpretations for Troxel are suitable.

WALLKILL SERIES

These soils are taxadjuncts because they contain more silt and less sand (field estimate) than the series range. Classification is fine-silty, mixed, mesic Thapto Histic Fluvaquent. Map unit Wb is correlated as a coprogenous substratum phase because coprogenous earth is above a depth of 60 inches. Interpretations for Wallkill are suitable.

WASHTENAW SERIES

These soils are taxadjuncts because they contain more silt and less sand (field estimate) than the series range. The classification is Aeric Fluvaquents, fine-silty, mixed, mesic. Interpretations for Washtenaw are suitable.

WEA SERIES

The Mollic epipedon is thicker than the series range and is thick enough to classify as Cumulic. However, since Cumulic is not recognized in the Argiudoll great group, the classification is not affected. Value of 3 and chroma of 2 in the 2Bt are outside the series range. A flooded phase SIR is assigned to map unit WtA because it is on low lying terraces which are flooded. Interpretations for Wea are suitable.

WHITAKER SERIES

Map unit WuA is correlated as a till substratum phase because loam till is above a depth of 60 inches.

CLASSIFICATION OF THE SOILS

Soil name	Family or higher taxonomic class
Allison-----	Fine-silty, mixed, mesic Cumulic Hapludolls
Alvin-----	Coarse-loamy, mixed, mesic Typic Hapludalfs
Battleground	Fine-silty, mixed, mesic Fluventic Hapludolls
Beecher-----	Fine, illitic, mesic Udollic Ochraqualfs
Berks-----	Loamy-skeletal, mixed, mesic Typic Dystrochrepts
Billett-----	Coarse-loamy, mixed, mesic Mollic Hapludalfs
Bowes-----	Fine-silty, mixed, mesic Mollic Hapludalfs
Bowes Variant	Fine-silty, mixed, mesic Mollic Hapludalfs
Brenton-----	Fine-silty, mixed, mesic Aquic Argiudolls
Camden-----	Fine-silty, mixed, mesic Typic Hapludalfs
Carmi-----	Coarse-loamy, mixed, mesic Typic Hapludolls
Ceresco-----	Coarse-loamy, mixed, mesic Fluvaquentic Hapludolls
Chalmers-----	Fine-silty, mixed, mesic Typic Haplaquolls
Cohoctah-----	Coarse-loamy, mixed, mesic Fluvaquentic Haplaquolls
Coloma-----	Mixed, mesic Alfic Udipsamments
*Crosby-----	Fine, mixed, mesic Aeris Ochraqualfs
Desker-----	Coarse-loamy, mixed, mesic Mollic Hapludalfs
Drummer-----	Fine-silty, mixed, mesic Typic Haplaquolls
Du Page-----	Fine-loamy, mixed, mesic Cumulic Hapludolls
*Elston-----	Coarse-loamy, mixed, mesic Typic Argiudolls
Fincastle-----	Fine-silty, mixed, mesic Aeris Ochraqualfs
Harpster-----	Fine-silty, mesic Typic Calciquolls
High Gap Variant.	Fine-loamy, mixed, mesic Ultic Hapludalfs
Hononegah-----	Sandy, mixed, mesic Entic Hapludolls
Houghton-----	Eucic, mesic Typic Medisaprists
Kalamazoo-----	Fine-loamy, mixed, mesic Typic Hapludalfs
Kosciusko-----	Fine-loamy, mixed, mesic Typic Hapludalfs
La Hogue-----	Fine-loamy, mixed, mesic Aquic Argiudolls
*Lafayette-----	Fine-silty, mixed, mesic Aquic Argiudolls
Lash-----	Coarse-loamy, mixed, mesic Fluventic Hapludolls
Lauramie-----	Fine-loamy, mixed, mesic Mollic Hapludalfs
Linkville-----	Fine-loamy, mixed, mesic Typic Argiudolls
Longlois-----	Fine-loamy, mixed, mesic Mollic Hapludalfs
Mahalasville	Fine-silty, mixed, mesic Typic Argiaquolls
Marker-----	Fine-loamy, mixed, mesic Aquollic Hapludalfs
Mellott-----	Fine-silty, mixed, mesic Mollic Hapludalfs
Miami-----	Fine-loamy, mixed, mesic Typic Hapludalfs
Milford-----	Fine, mixed, mesic Typic Haplaquolls
Millbrook-----	Fine-silty, mixed, mesic Udollic Ochraqualfs
Mulvey-----	Fine-silty, mixed, mesic Udollic Ochraqualfs

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
Muskego-----	Coprogenous, euic, mesic Limnic Medisaprists
Oakville-----	Mixed, mesic Typic Udipsamments
Ockley-----	Fine-loamy, mixed, mesic Typic Hapludalfs
Octagon-----	Fine-loamy, mixed, mesic Mollic Hapludalfs
Ouiatenon----	Sandy, mixed, mesic Fluventic Hapludolls
Palms-----	Loamy, mixed, euic, mesic Terric Medisaprists
Pella-----	Fine-silty, mixed, mesic Typic Haplaquolls
Peotone-----	Fine, montmorillonitic, mesic Cumulic Haplaquolls
Pinevillage	Loamy-skeletal, mixed (calcareous), mesic Typic Udifulvents
Rainsville---	Fine-loamy, mixed, mesic Typic Hapludalfs
Raub-----	Fine-silty, mixed, mesic Aquic Argiudolls
Richardville	Fine-loamy, mixed, mesic Typic Hapludalfs
Rockfield----	Fine-silty, mixed, mesic Typic Hapludalfs
*Rodman-----	Sandy-skeletal, mixed, mesic Typic Hapludolls
Ross-----	Fine-loamy, mixed, mesic Cumulic Hapludolls
Saranac-----	Fine, mixed, mesic Fluvaquentic Haplaquolls
Sawabash-----	Fine-silty, mixed (calcareous), mesic Cumulic Haplaquolls
Shadeland----	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Sleeth-----	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Sloan-----	Fine-loamy, mixed, mesic Fluvaquentic Haplaquolls
<u>1/</u>	
*Sparta	Sandy, mixed, mesic Entic Hapludolls
Spinks-----	Sandy, mixed, mesic Psammentic Hapludalfs
Starks-----	Fine-silty, mixed, mesic Aeric Ochraqualfs
Strawn-----	Fine-loamy, mixed, mesic Typic Hapludalfs
Tecumseh-----	Fine-silty, mixed, mesic Typic Argiudolls
Thackery-----	Fine-loamy, mixed, mesic Aquic Hapludalfs
Throckmorton	Fine-silty, mixed, mesic Mollic Hapludalfs
*Tice-----	Fine-silty, mixed, mesic Fluvaquentic Hapludolls
*Toronto-----	Fine-silty, mixed, mesic Udollic Ochraqualfs
Treaty-----	Fine-silty, mixed, mesic Typic Argiaquolls
*Troxel-----	Fine-silty, mixed, mesic Typic Argiudolls
Udorthents---	Udorthents
*Wallkill-----	Fine-loamy, mixed, nonacid, mesic Thapto-Histic Fluvaquents
*Washtenaw----	Fine-loamy, mixed, nonacid, mesic Aeric Fluvaquents
Waupecan-----	Fine-silty, mixed, mesic Typic Argiudolls
Waynetown----	Fine-silty, mixed, mesic Aeric Ochraqualfs
<u>1/</u> Sloan Variant	Fine-loamy, mixed, mesic, Fluvaquentic Haplaquoll

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
Wea-----	Fine-loamy, mixed, mesic Typic Argiudolls
Whitaker-----	Fine-loamy, mixed, mesic Aeric Ochraqualfs