

S.O. FILE COPY.

**CLASSIFICATION AND CORRELATION
OF
THE SOILS OF**

**MONROE COUNTY
INDIANA**

MARCH 1979



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



United States
Department of
Agriculture

Soil
Conservation
Service

Midwest TSC
Federal Bldg.-U.S. Courthouse, Rm. 393
Lincoln, NE 68508

SUBJECT: SC - Correlation - Classification and
Correlation of the Soils of Monroe
County, Indiana

DATE: April 4, 1979

TO:

John E. McClelland, Director, Soil Survey Class. & Corr., SCS, Wash., DC
James C. Powell, Chief, Soil Survey Pub. Branch, SCS, Washington, DC
H. R. Sinclair, Jr., State Soil Scientist, SCS, Indianapolis, IN

During the correlation of Monroe County, Indiana, Zipp Variant was classified as Aeric Haplaquepts; fine, mixed, nonacid, mesic, as indicated on page 15 of the correlation document; however, this change did not get into the computer and the classification of Zipp Variant on page 17 should be changed to agree with the classification on page 15.

A similar error was made concerning the Ebal series. The Ebal series was correlated as an Ultic Hapludalf; fine, mixed, mesic, but the change did not get into the computer, therefore, the classification of the Ebal series on page 16 should be changed accordingly.

Maurice Stout, Jr.
Head, Soils Staff

USDA:SCS:MStout:R&CC



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

Classification and Correlation
of the Soils of
Monroe County, Indiana

This correlation was prepared by Steve R. Base, Soil Correlator, MTSC, in consultation with Jerry Thomas, Soil Survey Party Leader; DeWayne Williams, State Soil Correlator; and Philip A. Kempf, Soil Scientist, IDNR, during the week of the final field review which was held December 12-16, 1977. A few remaining items were discussed with DeWayne Williams, State Soil Correlator, on February 10, 1978. The final correlation decisions were based on the first draft of the soil survey report, correlation samples, field correlation, field notes, final field review, laboratory data, and SCS-SOILS-5 forms. Kenneth Hinkley attended the comprehensive review in Monroe County, Indiana, September 13-17, 1976.

* Symbols consist of letters or a combination of letters and numbers; for example, AfB, CrC, and GpD3. The first two letters designate the kind of soil or miscellaneous area. The next letter indicates the class of slope. Symbols without a slope letter are used for level or nearly level soils, miscellaneous areas, or areas with karst topography. A number at the end of the symbol indicates the soil is eroded.

SOIL CORRELATION OF
MONROE COUNTY, INDIANA
FEBRUARY 1978

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name	
AfB, AfB2	Alford silt loam, 2 to 6 percent slopes	AfB	Alford silt loam, 2 to 6 percent slopes	✓
Ba1, BaA, Du3, DuE2	Bartle silt loam, 0 to 2 percent slopes	Ba	Bartle silt loam	✓
BdS, B1B2, B1A	Bedford silt loam, 2 to 6 percent slopes	BdB	Bedford silt loam, 2 to 6 percent slopes	✓
BkF	Berks-Weikert complex, 25 to 75 percent slopes	BkF	Berks-Weikert complex, 25 to 75 percent slopes	✓
Bo, Ba	Bonnie silt loam	Bo	Bonnie silt loam	✓
Bu	Burnside silt loam	Bu	Burnside silt loam	✓
CaD, HcD, HcD2, HcD3, HcE2, HcE3, CaE	Caneyville silt loam, 12 to 18 percent slopes	CaD	Caneyville silt loam, 12 to 18 percent slopes	✓
ChCK	Caneyville-Hagerstown silt loams, karst, 4 to 14 percent slopes	Ch	Caneyville-Hagerstown silt loams, karst	
NgF	Negley silt loam, 25 to 70 percent slopes	ChF	Cherwyn silt loam, 25 to 70 percent slopes	✓
CoF, CoD	Corydon-Stony silt loam, 25 to 75 percent slopes	CoF	Corydon Variant-Caneyville Variant complex, 25 to 70 percent slopes	✓
CrB, CrB2, CrA	Crider silt loam, 2 to 6 percent slopes	CrB	Crider silt loam, 2 to 6 percent slopes	✓
CrC, CrC2, CrC3	Crider silt loam, 6 to 12 percent slopes	CrC	Crider silt loam, 6 to 12 percent slopes	✓
CrD2, CrD2	Crider silt loam, 12 to 18 percent slopes, eroded	CrD	Crider silt loam, 12 to 18 percent slopes	✓

MONROE COUNTY, INDIANA --Continued

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
CsC	Crider-Caneyville silt loams, 6 to 12 percent slopes	CsC	Crider-Caneyville silt loams, 6 to 12 percent slopes
Ub, UbB	Urban land-Crider complex, 2 to 6 percent slopes	CtB	Crider-Urban land complex, 2 to 6 percent slopes ✓
U1, UbC	Urban land-Crider complex, 6 to 12 percent slopes	CtC	Crider-Urban land complex, 6 to 12 percent slopes ✓
Cu	Cuba silt loam	Cu	Cuba silt loam ✓
BqE, GpE2, GpE3, B1F	Berks-Gilpin silt loams, 18 to 25 percent slopes	EbE	Ebal-Gilpin-Hagerstown silt loams, 18 to 25 percent slopes ✓
EdB	Ebal-Wellston-Gilpin complex, 12 to 18 percent slopes	Edd	Ebal-Wellston-Gilpin silt loams, 12 to 18 percent slopes ✓
Eks, EkE2	Elkinsville silt loam, 2 to 6 percent slopes	EkE	Elkinsville silt loam, 2 to 6 percent slopes ✓
EkF, EkD2	Elkinsville silt loam, 20 to 40 percent slopes	EkF	Elkinsville silt loam, upland, 20 to 40 percent slopes ✓
GpD, GpD2	Gilpin silt loam, 12 to 18 percent slopes	GpD	Gilpin silt loam, 12 to 18 percent slopes ✓
GpE3, Gu	Gilpin soils, 12 to 22 percent slopes, severely eroded	GpD3 GrD	Gilpin-Gullied land complex, 12 to 22 percent slopes — See Amendment ✓
HaC, HaC2	Hagerstown silt loam, 6 to 12 percent slopes	HaC	Hagerstown silt loam, 6 to 12 percent slopes ✓
HaD2	Hagerstown silt loam, 12 to 18 percent slopes, eroded	HaD	Hagerstown silt loam, 12 to 18 percent slopes ✓

ADAMS COUNTY, ILLINOIS --Continued

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
HaEz	Hagerstown silt loam, 18 to 25 percent slopes, eroded	HaE	Hagerstown silt loam, 18 to 25 percent slopes
HbD3	Hagerstown silty clay loam, 12 to 22 percent slopes, severely eroded	HbD3	Hagerstown silty clay loam, 12 to 22 percent slopes, severely eroded ✓
HcEK	Hagerstown-Caneyville silt loams, karst, 12 to 32 percent slopes	Hc	Hagerstown-Caneyville silt loams, karst ✓
Hd	Haymond silt loam	Hd	Haymond silt loam ✓
HkF	Hickory silt loam, 25 to 70 percent slopes	HkF	Hickory silt loam, 25 to 70 percent slopes ✓
HoA	Hosmer silt loam, 0 to 2 percent slopes	HoA	Hosmer silt loam, 0 to 2 percent slopes ✓
HoB, HoB2, OtA, OtB, OtB2	Hosmer silt loam, 2 to 6 percent slopes	HoB	Hosmer silt loam, 2 to 6 percent slopes ✓
HoC, HoC2, HoC3, OtC, OtC2, OtC3, OtD2, OtD3	Hosmer silt loam, 6 to 12 percent slopes	HoC	Hosmer silt loam, 6 to 12 percent slopes
Ur, UrB	Urban land-Hosmer complex, 2 to 12 percent slopes	UrB	Hosmer-Urban land complex, 2 to 12 percent slopes ✓
SyA, JoA, LaA	Stoy silt loam, 0 to 3 percent slopes	IvA	Iva silt loam, 0 to 3 percent slopes ✓
MbB, MbB2	Martinsville loam, 2 to 6 percent slopes	MbB	Martinsville loam, 2 to 6 percent slopes ✓
PaB, PaB2	Parke silt loam, 2 to 6 percent slopes	PaB	Parke silt loam, 2 to 6 percent slopes ✓
PaC, PaC2	Parke silt loam, 6 to 12 percent slopes	PaC	Parke silt loam, 6 to 12 percent slopes

MONROE COUNTY, INDIANA --Continued

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
PcD1	Parke-Nagley silt loams, 12 to 18 percent slopes, eroded	PcD	Parke-Chetwynd silt loams, 12 to 18 percent slopes
PeA	Pekin silt loam, 0 to 2 percent slopes	PeA	Pekin silt loam, 0 to 2 percent slopes ✓
PeB2	Pekin silt loam, 2 to 6 percent slopes, eroded	PeB	Pekin silt loam, 2 to 6 percent slopes ✓
PeC2	Pekin silt loam, 6 to 12 percent slopes, eroded	PeC	Pekin silt loam, 6 to 12 percent slopes
Pe	Peoga silt loam	Pe	Peoga silt loam
PrC, PrC2	Princeton sandy loam, 4 to 10 percent slopes	PrC	Princeton loam, 4 to 10 percent slopes
PrD2	Princeton sandy loam, 14 to 25 percent slopes, eroded	PrE	Princeton loam, 18 to 25 percent slopes ✓
GtB, GtB2	Grayford silt loam, 2 to 6 percent slopes	GtB	Fyker silt loam, 2 to 6 percent slopes ✓
GtC, GtC2	Grayford silt loam, 6 to 12 percent slopes	GtC	Fyker silt loam, 6 to 12 percent slopes ✓
GtD	Grayford silt loam, 12 to 18 percent slopes	GtD	Fyker silt loam, 12 to 18 percent slopes ✓
Sf	Steff silt loam	Sf	Steff silt loam
St	Stendal silt loam	St	Stendal silt loam
Ge	Genesee silt loam	Sx	Stonelick silt loam
TlA, TlA	Tilsit silt loam, 0 to 2 percent slopes	TlA	Tilsit silt loam, 0 to 2 percent slopes
TlB, TlB2, TlB1	Tilsit silt loam, 2 to 6 percent slopes	TlB	Tilsit silt loam, 2 to 6 percent slopes

MCNFEE COUNTY, INDIANA --Continued

Field symbols	Field mapping unit name	Publi- cation symbol	Approved mapping unit name
Ua, Ux	Uorthents, loamy	Ua	Uorthents, loamy
Pp, Qu, Qa	Pits, quarries	Ua	Uorthents-Pits complex
Wa	Wakeland silt loam	Wa	Wakeland silt loam
WeC, WeC2, WeC3, WeD, WeD2, WeD3	Wellston silt loam, 6 to 12 percent slopes	WeC	Wellston silt loam, 6 to 12 percent slopes
WmC, WmC2	Wellston-Gilpin silt loams, 6 to 20 percent slopes, eroded	WmC	Wellston-Gilpin silt loams, 6 to 20 percent slopes
WtA, WtA	Whitaker loam, 0 to 3 percent slopes	WtA	Whitaker loam
Wr	Wilbur silt loam	Wr	Wilbur silt loam
ZnC2, ZnC3	Zanesville silt loam, 6 to 12 percent slopes, eroded	ZnC	Zanesville silt loam, 6 to 12 percent slopes
Zo	Zipp silty clay loam	Zo	Zipp silty clay loam
Zp, Zo	Zipp silty clay loam	Zp	Zipp silty clay loam, frequently flooded
McA	McGary silt loam, 0 to 3 percent slopes	Zs	Zipp Variant silt loam

Monroe County, Indiana

Series established by this correlation:

Chetwynd (Morgan County, Indiana)
Ebal (Monroe County, Indiana)
Ryker (Jefferson County, Indiana)

Series dropped or made inactive:

None

Join Statement:

The state soil scientist has certified that mapping is complete and that both the detailed soil maps and general soil map are joined with the maps from the surrounding counties.

Certification of Survey Area Typical Pedons:

The location of typical pedons of soil series used in the survey area have been checked against the soil map. The state soil scientist certified that all the typical pedons of the soil series are correctly located.

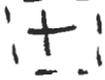
Disposition of Field Sheets:

All mapping has been compiled on halftone film positives. Fire protection negatives have been made of the original photographs and double-weight reproduction provided the field office in Bloomington.

Instructions for Map Finishing:

All conventional symbols to be retained for publication are noted in the legend of conventional symbols. Appropriate symbols will be assigned using "Conventional and Special Symbols Legend," SCS-SOILS-37A, dated 3/75.

LEGEND OF CONVENTIONAL SYMBOLS

<u>Description</u>	<u>Symbol</u>	<u>Disposition</u>
BOUNDARIES		
County		Retain
Minor civil division		Retain
National forest or reservation		Retain
Field sheet matchline		Retain
AD HOC BOUNDARY (label)		
Small park, airfield		Retain
Cemetery		Retain
Flood pool		Delete
GRID TICK		Retain
SECTION OR OTHER LAND SURVEY CORNERS		Retain

Monroe County, Indiana

ROADS

Divided (wide or variable median)



Retain

Good motor



Retain

Poor motor



Delete

Interchanges



Delete

Overpass, underpass



Delete

ROAD EMBLEMS & DESIGNATIONS

State



Retain

RAILROAD

Single track



Retain

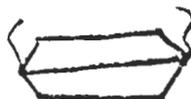
Abandoned



Delete

DAMS

Large (to scale)



Retain

Small



Retain

Monroe County, Indiana

PITS

Gravel pit		Delete
Quarry, mine		Retain
Cut and fill land		Delete

MISCELLANEOUS CULTURAL FEATURES

Large buildings (to scale, label)		Delete
Farmstead, house (omit in urban areas)		Delete
Church		Retain
School		Retain

DRAINAGE

Perennial, double line		Retain
Intermittent, double line		Delete
Perennial, single line		Retain
Intermittent, single line		Retain as
Drainage end		Retain--see SCS-SOILS-37A

Monroe County, Indiana

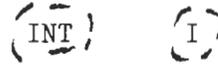
LAKES, PONDS, AND RESERVOIRS

Perennial



Retain

Intermittent



Delete

MISCELLANEOUS WATER FEATURES

Spring



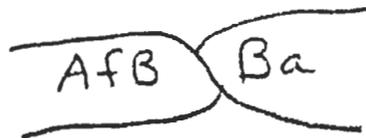
Delete

Wet spot



Retain

SOIL DELINEATIONS AND
SOIL SYMBOLS



Retain

ESCARPMENTS

Bedrock



Delete

Other than bedrock



Delete

SHORT STEEP SLOPE



Retain

GULLY



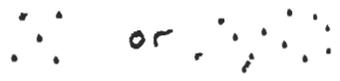
Delete

DEPRESSION OR SINK

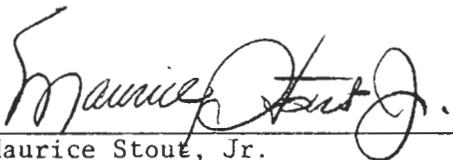


Retain

MISCELLANEOUS

Clay spot		Retain
Chert fragments		Delete
Rock outcrop		Delete
Sandy spot		Delete
Severely eroded spot		Delete

Approved: March 9, 1979


Maurice Stout, Jr.
Head, Soils Staff
Midwest TSC

CONVERSION LEGEND FOR
MONROE COUNTY, INDIANA
FEBRUARY 1976

Field symbol	Publi- cation symbol						
AfE	AfB	GpE2	EbE	PaE3	HoC	WmC2	WmC
AfE2	AfB	GpE3	EbE	PaE	FaE	Wr	Wr
BaA	Ba	GtB	FcB	PaE2	PaE	WtA	Wo
BdA	BdE	GtB2	FcB	PaC	FaC	ZnC2	ZnC
BdE	BdE	GtC	FcC	PaC2	PaC	ZnC3	ZnC
		GtC2	RcC				
BdE2	BdE	GtD	RcD	PcE2	PcD	Zo	Zp
BfE	FbE	GtD2	RcD	PeA	PeA	Zo	Zo
BgF	EbF	Gu	GpD3	PeE2	PeE	Zp	Zp
BkF	EkF	HaC	HaC	PeC2	PeC		
Bn	Bo	HaC2	HaC	Po	Po		
Bo	Bo	HaD2	HaD	Pp	Ud		
Bu	Bu	HaE2	HaE	PrC	PrC		
CaE	CaD	HbD3	HbD3	PrC2	PrC		
CaE	CaD	HcD	CaD	PrE2	PrE		
CbCK	Cb	HcD2	CaD	Pt	Ud		
CcB	HoB			Qa	Ud		
CcB2	HoB	HcD3	CaD	Qu	Ud		
CoD	CoF	HcE2	CaD	Sf	Sf		
CoF	CoF	HcE3	CaD	St	St		
CrA	CrB	HcEK	Hc	SyA	IvA		
CrB	CrB	Hd	Hd	TlA	TlA		
CrB2	CrB						
CrC	CrC	HkF	HkF	TlE	TlE		
CrC2	CrC	HoA	HcA	TlE?	TlE		
CrC3	CrC	HoE	HoE	TsA	TlA		
CrD2	CrD	HoB2	HoB	TsE2	TlE		
CrD2	CrD	HoC	HoC	Ua	Ua		
CsC	CsC	HoC2	HoC	Ub	CtE		
Cu	Cu	HoC3	HoC	UeE	CtE		
Cx	Ha	JoA	IvA	UeC	CtC		
DuA	Ba	LaA	IvA	Ul	CtC		
DuE	Ba	MbA	MbB	Un	HtE		
DuE2	Ba	MbB2	MbB	UeE	HtE		
EiF	EiD	McA	Zs	Wa	Wa		
EkE	EkB	NgF	ChF	WeC	WeC		
EkE2	EkB	OtA	HoB	WeC2	WeC		
EkE2	EkF	OtB	HoB	WeC3	WeC		
EkF	EkF	OtE2	HoB	WeE	WeC		
Ge	Gx	OtC	HoC	WeD2	WeC		
GpD	GpD	OtC2	HoC	WeE3	WeC		
GpE2	GpD	OtC3	HoC	WlA	Wo		
GpE3	GpD3	OtD2	HoC	WmC	WmC		

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

List of Soils Characterized at Purdue Soils Lab

<u>Name Pedon was Sampled Under</u>	<u>Survey Number</u>	<u>Lab Number</u>	<u>Series They Classify In</u>	<u>Approved Classification</u>
Crider	S72IN53-1	M07201	Crider	Crider
Hagerstown	S75IN105-1	M07501	Hagerstown	Hagerstown
Hagerstown	S75IN105-2	M07502	Hagerstown	Hagerstown
Hagerstown	S75IN105-3	M07503	Caneyville	Caneyville
Caneyville	S76IN105-1	M07601	Caneyville taxadjunct (hue too red, reaction too high)	Caneyville taxadjunct
Caneyville	S76IN105-5	M07605	Caneyville taxadjunct (hue too red in upper Bt)	Caneyville taxadjunct
Haymond	S76IN105-2	M07602	Haymond	Haymond
Haymond	S76IN105-3	M07603	Haymond	Haymond
Haymond	S76IN105-4	M07604	Haymond Variant (coarse-loamy)	Haymond Variant
Peoga	S75IN105-4	M07504	Peoga	Peoga
Peoga	S75IN105-5	M07505	Peoga	Peoga
Peoga	S75IN105-6	M07506	Peoga	Peoga
Ebal	S77IN105-1		Ebal	Ebal

List of Soils Characterized at Lincoln Lab

Ebal (mineralogy only)	S77IN105-1		Ebal	Ebal
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Monroe County, Indiana

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

by
Steve R. Base

ALFORD SERIES

The Alford soil in Monroe County is a taxadjunct to the Alford series because it has a lower base saturation and pH. It is an Ultic Hapludalf; fine-silty, mixed, mesic.

BERKS SERIES

The bedrock is somewhat softer than is described for the series.

CANEYVILLE VARIANT

The Caneyville soil in mapping unit CoF is a variant because of the large number of coarse fragments. It is in the clayey-skeletal, mixed, mesic family of Typic Hapludalfs.

CORYDON VARIANT

The Corydon soil in Monroe County is a variant because of the large number of coarse fragments. It is in the clayey-skeletal, mixed, mesic family of Lithic Argiudolls.

MARTINSVILLE SERIES

This soil is a taxadjunct to the Martinsville series because the B23t and B3 horizons are very strongly acid. It is an Ultic Hapludalf; fine-loamy, mixed, mesic.

WHITAKER SERIES

This soil is a taxadjunct to the Whitaker series because it has a thicker solum and is more acid. It is an Aeric Ochraqualf; fine-loamy, mixed, mesic.

ZIPP VARIANT

This soil is a variant because it is more acid and lacks the gray colors of the very poorly drained Zipp series. It is an Aeric Haplaquept; fine, mixed, nonacid, mesic.

CLASSIFICATION OF THE SOILS

An asterisk in the first column indicates a taxadjunct to the series. See notes for a description of those characteristics of this taxadjunct that are outside the range of the series]

Soil name	Family or higher taxonomic class
Alford-----	Fine-silty, mixed, mesic Typic HapludalFs
Bartle-----	Fine-silty, mixed, mesic Aeric Fragiqualfs
Bedford-----	Fine-silty, mixed, mesic Typic Fragiudults
Berks-----	Loamy-skeletal, mixed, mesic Typic Dystrochrepts
Bonnie-----	Fine-silty, mixed, acid, mesic Typic Fluvaquents
Burnside-----	Loamy-skeletal, mixed, acid, mesic Typic Udifluvents
Caneyville---	Fine, mixed, mesic Typic HapludalFs
Caneyville Variant.	Clayey-skeletal, mixed, mesic Typic HapludalFs
Chetwynd.	Fine-loamy, mixed, mesic Typic Hapludults
Corydon Variant.	Clayey-skeletal, mixed, mesic Lithic Argiudolls
Crider-----	Fine-silty, mixed, mesic Typic PaleudalFs
Cuba-----	Fine-silty, mixed, mesic Fluventic Dystrochrepts
Ebal-----	Fine, mixed, mesic Typic HapludalFs <u>Ultic</u>
Elkinsville	Fine-silty, mixed, mesic Ultic HapludalFs
Gilpin-----	Fine-loamy, mixed, mesic Typic Hapludults
Hagerstown---	Fine, mixed, mesic Typic HapludalFs
Haymond-----	Coarse-silty, mixed, nonacid, mesic Typic Udifluvents
Hickory-----	Fine-loamy, mixed, mesic Typic HapludalFs
Kosmer-----	Fine-silty, mixed, mesic Typic FragiudalFs
Iva-----	Fine-silty, mixed, mesic Aeric Ochraqualfs
*Martinsville	Fine-loamy, mixed, mesic Typic HapludalFs
Parke-----	Fine-silty, mixed, mesic Ultic HapludalFs
Pekin-----	Fine-silty, mixed, mesic Aquic FragiudalFs
Peoga-----	Fine-silty, mixed, mesic Typic Ochraqualfs
Princeton---	Fine-loamy, mixed, mesic Typic HapludalFs
Eyker-----	Fine-silty, mixed, mesic Typic PaleudalFs
Steff-----	Fine-silty, mixed, mesic Fluvaquentic Dystrochrepts
Stendal-----	Fine-silty, mixed, acid, mesic Aeric Fluvaquents

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
Stonelick----	Coarse-loamy, mixed (calcareous), mesic Typic Udifluvents
Tilsit-----	Fine-silty, mixed, mesic Typic Fragiudults
Wakeland-----	Coarse-silty, mixed, nonacid, mesic Aeric Fluvaquents
Weikert-----	Loamy-skeletal, mixed, mesic Lithic Dystrochrepts
Wellston-----	Fine-silty, mixed, mesic Ultic Hapludalfs
*Whitaker-----	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Wilbur-----	Coarse-silty, mixed, nonacid, mesic Aquic Udifluvents
Zanesville----	Fine-silty, mixed, mesic Typic Fragiudalfs
Zipp-----	Fine, mixed, nonacid, mesic Typic Haplaquepts
Zipp Variant	Fine, mixed, acid, mesic Typic Aeric Haplaquepts