CLASSIFICATION AND CORRELATION OF THE SOILS OF

MARTIN COUNTY INDIANA

MAY 1984

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

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

Classification and Correlation of the Soils of Martin County, Indiana

The Martin County final correlation was made by Louie L. Buller at the MNTC in Lincoln, Nebraska, during the period of February 7 to April 15, 1983. The Indiana State Soils Staff participated through telephone conversations and letters. Material available and used in making the final correlation was the field correlation, draft copy of the manuscript, laboratory data, field sheets, field notes, and correlation samples. Louie L. Buller participated in the comprehensive review.

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 that 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.

Field Symbols	Field Map Unit Name	Publication Symbol	Approved Map Unit Name
Ab, Su, SuV	Abscota loamy sand, frequently flooded	Ab	Abscota loamy sand, frequently flooded
AvC2, AvC, BmB, BmC, EsB, MeB, MfB, MfC2, MfC3, OcB, PrB, PrC, PrC2, RtB	Alvin-Chelsea loamy fine sands, 4 to 10 percent slopes, eroded	AvC2	Alvin-Chelsea loamy fine sands, 4 to 10 percent slopes, eroded
AvE, BmD, MfE2, PrD2, PrE, PrE2	Alvin-Chelsea loamy fine sands, 15 to 35 percent slopes	AvE	Alvin-Chelsea loamy fine sands, 15 to 35 percent slopes
Ba, Ay, BaB, DuA, DuB, HeA, HeB, Pg, UgA	Bartle silt loam	Ba	Bartle silt loam
Bk,	Birds, silt loam, frequently flooded	Bk	Birds silt loam, frequently flooded
Ph, Ev, Pt	Petrolia silt loam, frequently flooded		
Bo	Bonnie silt loam, frequently flooded	Bo	Bonnie silt loam, frequently flooded
Bu, Br	Burnside loam, occasionally flooded	Bu	Burnside loam, occasionally flooded
CaB, CaA, E1A, E1B, E1C2, E1C3, UnA, UnB, UnC2, UnC3	Camden silt loam, 1 to 5 percent slopes	CaB	Camden silt loam, 1 to 5 percent slopes
CnB, CnB2, CnC2, CnC3, CnD2, CnD3	Cincinnati silt loam, 3 to 10 percent slopes	CnB	Cincinnati silt loam, 3 to 10 percent slopes

Field Symbols	Field Map Unit Name	Publication Symbol	Approved Map Unit Name
CrC, BdC2, CrB, CrC2, CrD2	Crider silt loam, 3 to 10 percent slopes	CrC	Crider silt loam, 3 to 10 percent slopes
FbD, BcD	Fairpoint shaly silt loam, 12 to 45 percent slopes	FbD	Fairpoint shaly silt loam, 12 to 45 percent slopes
FaC	Fairpoint shaly silty clay loam, 4 to 16 percent slopes	FcC	Fairpoint shaly silty clay loam, 4 to 16 percent slopes
HaD2, CcD3, CoF, FrD2, FrD3, HaC2, HaE2	Hagerstown silt loam, 12 to 18 percent slopes, eroded	HaD	Hagerstown silt loam, 12 to 18 percent slopes
Hd, Hb	Haymond silt loam, frequently flooded	Hd	Haymond silt loam, frequently flooded
Sa, Cu, Cu5	Sharon silt loam, frequently flooded		
HoB, HoA, HoB2, OtA, OtB, OtC2, SvB	Hosmer silt loam, 2 to 6 percent slopes	HoB	Hosmer silt loam, 2 to 6 percent slopes
JoA, IvA, SvA, T1A	Johnsburg silt loam, 0 to 2 percent slopes	JoA	Johnsburg silt loam, 0 to 2 percent slopes
MaB, MaA3, MaB2	Markland silt loam, 1 to 5 percent slopes	MaB	Markland silt loam, 1 to 5 percent slopes
McC3, MaC2, MaD2 MaE2, McD3, McE, UnD3	Markland silty clay loam, 6 to 12 percent slopes, severely eroded	McC3	Markland silty clay loam, 6 to 12 percent slopes, severely eroded
MdA, EsA, MfA, OcA, PrA, RtA	Martinsville loam, 0 to 2 percent slopes	MdA	Martinsville loam, 0 to 2 percent slopes

Field Symbols	Field Map Unit Name	Publication Symbol	Approved Map Unit Name
MgA, McA	McGary silty clay loam, rarely flooded, 0 to 2 percent slopes	MgA	McGary silty clay loam, rarely flooded, 0 to 2 percent slopes
NeE, CmE, NeE2, NeF, NgE2	Negley loam, 18 to 35 percent slopes	NeE	Negley silt loam, 18 to 35 percent slopes
Nm, Nw	Newark silt loam, frequently flooded	Nm	Newark silt loam, frequently flooded
No	Nolin silt loam, frequently flooded	No	Nolin silt loam, frequently flooded
PaC2, NeC2, NeC3, NgC2, PaC3	Parke silt loam, 6 to 12 percent slopes, eroded	PaC2	Parke silt loam, 6 to 12 percent slopes, eroded
PaD2, NeD2, NeD3, NgD2, PaD3	Parke silt loam, 12 to 18 percent slopes, eroded	PaD2	Parke silt loam, 12 to 18 percent slopes, eroded
PeB, PeA, PeC2	Pekin silt loam, 2 to 6 percent slopes	PeB	Pekin silt loam, 2 to 6 percent slopes
PkB, PaB, PkA	Pike silt loam, 2 to 6 percent slopes	PkB	Pike silt loam, 2 to 6 percent slopes
UhD	Udorthents, silty, 6 to 14 percent slopes	UhD	Udorthents, silty, 6 to 14 percent slopes
Up, UpD	Udorthents-Pits complex	Up	Udorthents-Pits complex
Wa, Sh	Wakeland silt loam, frequently flooded	Wa	Wakeland silt loam, frequently flooded
St, Sn	Stendal silt loam, frequently flooded		
WeB, WeB2	Wellston silt loam, 2 to 6 percent slopes	WeB	Wellston silt loam, 2 to 6 percent slopes
WeC2, GlC2, WeC3	Wellston silt loam, 6 to 12 percent slopes, eroded	WeC2	Wellston silt loam, 6 to 12 percent slopes, eroded

Field Symbols	Field Map Unit Name	Publication Symbol	Approved Map Unit Name
WeD2, GlD2, GlE2, GnD2, OtD2, ZaD2	Wellston silt loam, 12 to 18 percent slopes, eroded	WeD2	Wellston silt loam, 12 to 18 percent slopes, eroded
WeD3, Gu, GlD3, OtD3, ZaD3	Wellston silt loam, 12 to 18 percent slopes, severely eroded	WeD3	Wellston silt loam, 12 to 18 percent slopes, severely eroded
WgG, BgE, BhG, GpF, WoG	Wellston-Berks-Gilpin complex, 18 to 70 percent slopes	WgG	Wellston-Berks-Gilpin complex, 18 to 70 percent slopes
WlD, EbC, EbC2, EbD2	Wellston-Ebal silt loams, 10 to 18 percent slopes	WlD	Wellston-Ebal silt loams, 10 to 18 percent slopes
WnE, HgE, WeE2	Wellston-Gilpin complex, 12 to 30 percent slopes	WnE	Wellston-Gilpin complex, 12 to 30 percent slopes
WpD3, UdD, UdD3, UwD3, WpD	Wellston-Udorthents complex, 12 to 18 percent slopes, severely eroded	WpD	Wellston-Udorthents complex, 12 to 18 percent slopes
NhD2, NhD, UcC2	Negley-Udorthents complex, 6 to 18 percent slopes, eroded		
Wr, Ee, Se, Ss	Wilbur silt loam, frequently flooded	Wr	Wilbur silt loam, frequently flooded
Wt, Ch, Ge, Kh	Wirt sandy loam, frequently flooded	Wt	Wirt fine sandy loam, frequently flooded
ZaB, BdA, BdB, BdB2, JoB, T1B, T1B2, ZaB2	Zanesville silt loam, 2 to 6 percent slopes	ZaB	Zanesville silt loam, 2 to 6 percent slopes
ZaC2, HoC2	Zanesville silt loam, 6 to 12 percent slopes, eroded	ZaC2	Zanesville silt loam, 6 to 12 percent slopes, eroded
ZaC3	Zanesville silt loam, 6 to 12 percent slopes, severely eroded	ZaC3	Zanesville silt loam, 6 to 12 percent slopes, severely eroded

Field Symbols	Field Map Unit Name	Publication Symbol	Approved Map Unit Name
ZnB3, TnB3, UdA, UdB, UdB3, UtB3	Zanesville-Udorthents complex, 2 to 6 percent slopes, severely eroded	ZnB	Zanesville-Udorthents complex, 2 to 6 percent slopes
ZnC3, UcC, UdC, UdC3, UzC3	Zanesville-Udorthents complex, 6 to 12 percent slopes, severely eroded	ZnC	Zanesville-Udorthents complex, 6 to 12 percent slopes
Zp, Ly, Mo	Zipp silty clay loam, rarely flooded	Zp	Zipp silty clay loam, rarely flooded

Series Established by This Correlation:

None

Series Dropped or Made Inactive:

None

Certification Statement:
The state soil scientist certifies that:

1. The field mapping is complete.

2. Both the detailed maps and general soil maps have been joined throughout the survey area and with the adjoining soil surveys.

3. The interpretations have been coordinated with the adjoining soil surveys and are in accord with the information on the SCS-SOILS-5 forms.

4. The legal descriptions are correct and the typical pedons are from delineations bearing the name of the typical pedon.

Verification of Exact Cooperator Names:
For the front cover:

> United States Department of Agriculture, Soil Conservation Service, and Forest Service in cooperation with Purdue University Agricultural Experiment Station and Indiana Department of Natural Resources, Soil and Water Conservation Committee.

The cooperators to be listed on the inside of the front cover are the same as those listed on the front cover and in addition state; "It is part of the technical assistance furnished to the Martin County Soil and Water Conservation District. Financial assistance was made available by the board of commissioners, Martin County, and the Indiana Department of Natural Resources."

Disposition of Field Sheets:
The original field sheets for Martin County will be kept at the district office in Martin County where they will later be compiled and finished. The halftone positive mylars are considered to be the original field sheets. Copies have been made for use by the field office and for fire protection.

Prior Soil Survey Publications:
A reference to the 1946 Martin County soil survey should be in the introduction of this publication. The prior published survey will be a literature citation. For example, "The first soil survey of Martin County was completed in 1936 and published in 1946 (ref. citation). This survey updates the first survey and provides additional information and larger maps that show the soils in greater detail."

Instruction for Map Compilation and Map Finishing:
The symbols of the following conventional and special symbols legend are those that will be used in map finishing.

SCS-SOILS-37A
3-75

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

Soil Survey Area: Martin County
State: Indiana

Date: 12/82

CULTURAL FEATURES

BOUNDARIES

County or parish

Minor civil division

Reservation (national forest or park, state forest or park, and large airport)

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

County, farm or ranch

ROAD EMBLEMS & DESIGNATIONS

Federal 287

State 52

RAILROAD

DAMS

Large (to scale)

Medium or small

PITS

Gravel pit

Mine or quarry

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

LAKES, PONDS AND RESERVOIRS

Perennial water w

MISCELLANEOUS WATER FEATURES

Marsh or swamp

Wet spot

SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SOIL SYMBOLS

ESCARPMENTS CeA FoB2

Bedrock (points down slope)

SHORT STEEP SLOPE

GULLY

MISCELLANEOUS

Rock outcrop (includes sandstone and shale)

Sandy spot

Severely eroded spot

PRIME FARMLAND MAP UNITS

The following map units meet the soil requirements for prime farmland:

Publication Symbol	Approved Map Unit Name
Ba	Bartle silt loam (where drained)
Bk	Birds silt loam, frequently flooded (where drained and not frequently flooded during the growing season)
Bo	Bonnie silt loam, frequently flooded (where drained and not frequently flooded during the growing season)
Bu	Burnside loam, occasionally flooded
CaB	Camden silt loam, 1 to 5 percent slopes
Hd	Haymond silt loam, frequently flooded (where not frequently flooded during the growing season)
HoB	Hosmer silt loam, 2 to 6 percent slopes
JoA	Johnsburg silt loam, 0 to 2 percent slopes
MaB	Markland silt loam, 1 to 5 percent slopes
MdA	Martinsville loam, 0 to 2 percent slopes
MgA	McGary silty clay loam, 0 to 2 percent slopes (where drained)
Nm	Newark silt loam, frequently flooded (where drained and not frequently flooded during the growing season)
No	Nolin silt loam, frequently flooded (where not frequently flooded during the growing season)
PeB	Pekin silt loam, 2 to 6 percent slopes
PkB	Pike silt loam, 2 to 6 percent slopes
Wa	Wakeland silt loam, frequently flooded (where drained and not frequently flooded during the growing season.)
WeB	Wellston silt loam, 2 to 6 percent slopes
Wr	Wilbur silt loam, frequently flooded (where not frequently flooded during the growing season.)
Wt	Wirt fine sandy loam, frequently flooded (where not frequently flooded during the growing season)

Publication Symbol	Approved Map Unit Name
ZaB	Zanesville silt loam, 2 to 6 percent slopes
Zp	Zipp silty clay loam (where drained)

Approved: May 1, 1984

Nick Bare for

RODNEY F. HARNER
Head, Soils Staff
Midwest NTC

CONVERSION LEGEND RELATING FIELD MAP SYMBOLS TO PUBLICATION SYMBOLS

Field Symbol	Publication Symbol	Field Symbol	Publication Symbol	Field Symbol	Publication Symbol
Ab	Ab	CrC2	CrC	HeB	Ba
AvC	AvC2	CrD2	CrC	HgE	WnE
AvC2	AvC2	Cu	Hd	HoA	HoB
AvE	AvE	Cu5	Hd	HoB	HoB
Ay	Ba	DuA	Ba	HoB2	HoB
Ba	Ba	DuB	Ba	HoC2	ZaC2
BaB	Ba	EbC	W1D	IvA	JoA
BcD	FbD	EbC2	W1D	JoA	JoA
BdA	ZaB	EbD2	W1D	JoB	ZaB
BdB	ZaB	Ee	Wr	Kh	Wt
BdB2	ZaB	E1A	CaB	Ly	Zp
BdC2	CrC	E1B	CaB	MaA3	MaB
BgE	WgG	E1C2	CaB	MaB	MaB
BhG	WgG	E1C3	CaB	MaB2	MaB
Bk	Bk	EsA	MdA	MaC2	McC3
BmB	AvC2	EsB	AvC2	MaD2	McC3
BmC	AvC2	Ev	Bk	MaE2	McC3
BmD	AvE	FaC	FcC	McA	MgA
Bo	Bo	FbD	FbD	McC3	McC3
Br	Bu	FrD2	HaD	McD3	McC3
Bu	Bu	FrD3	HaD	McE	McC3
CaA	CaB	Ge	Wt	MdA	MdA
CaB	CaB	G1C2	WeC2	MeB	AvC2
CcD3	HaD	G1D2	WeD2	MfA	MdA
Ch	Wt	G1D3	WeD3	MfB	AvC2
CmE	NeE	G1E2	WeD2	MfC2	AvC2
CnB	CnB	GnD2	WeD2	MfC3	AvC2
CnB2	CnB	GpF	WgG	MfE2	AvE
CnC2	CnB	Gu	WeD3	MgA	MgA
CnC3	CnB	HaC2	HaD	Mo	Zp
				NeC2	PaC2
CnD2	CnB	HaD2	HaD	NeC3	PaC2
CnD3	CnB	HaE2	HaD	NeD2	PaD2
CoF	HaD	Hb	Hd	NeD3	PaD2
CrB	CrC	Hd	Hd	NeE	NeE
CrC	CrC	HeA	Ba	NeE2	NeE

Field Symbol	Publication Symbol	Field Symbol	Publication Symbol	Field Symbol	Publication Symbol
NeF	NeE	Pt	Bk	UwD3	WpD
NgC2	PaC2	RtA	MdA	UzC3	ZnC
NgD2	PaD2	RtB	AvC2	Wa	Wa
NgE2	NeE	Sa	Hd	WeB	WeB
NhD	WpD	Se	Wr	WeB2	WeB
NhD2	WpD	Sh	Wa	WeC2	WeC2
Nm	Nm	Sn	Wa	WeC3	WeC2
No	No	Ss	Wr	WeD2	WeD2
Nw	Nm	St	Wa	WeD3	WeD3
		Su	Ab		
OcA	MdA	SuV	Ab	WeE2	WnE
OcB	AvC2	SvA	JoA	WgG	WgG
OtA	HoB	SvB	HoB	WlD	WlD
OtB	HoB	T1A	JoA	WoG	WgG
OtC2	HoB	T1B	ZaB	WnE	WnE
OtD2	WeD2	T1B2	ZaB	WpD	WpD
OtD3	WeD3	TnB3	ZnB	WpD3	WpD
PaB	PkB	UcC	ZnC	Wr	Wr
PaC2	PaC2	UcC2	WpD	Wt	Wt
PaC3	PaC2	UdA	ZnB	ZaB	ZaB
PaD2	PaD2	UdB	ZnB	ZaB2	ZaB
PaD3	PaD2	UdB3	ZnB	ZaC2	ZaC2
PeA	PeB	UdC	ZnC	ZaC3	ZaC3
PeB	PeB	UdC3	ZnC	ZaD2	WeD2
PeC2	PeB	UdD	WpD	ZaD3	WeD3
Pg	Ba	UdD3	WpD	ZnB3	ZnB
Ph	Bk	UgA	Ba	ZnC3	ZnC
PkA	PkB	UhD	UhD	Zp	Zp
PkB	PkB	UnA	CaB		
PrA	MdA	UnB	CaB		
PrB	AvC2	UnC2	CaB		
PrC	AvC2	UnC3	CaB		
PrC2	AvC2	UnD3	McC3		
PrD2	AvE	Up	Up		
PrE	AvE	UpD	Up		
PrE2	AvE	UtB3	ZnB		

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

Data for which Forms SCS-SOILS-8 have been prepared.
Analysis by Purdue University.

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Princeton	*S80IN101-15-(1-6)	AvE	Alvin
Bartle	*S80IN101-6-(1-7)	Ba	Bartle
Bonnie	*S80IN101-1-(1-4)	Bo	Bonnie, taxadjunct--coarse-loamy, mixed, mesic Typic Fluvaquents
Burnside	*S80IN101-10-(1-5)	Bu	Burnside, taxadjunct--loamy-skeletal, mixed, nonacid, mesic Typic Udifluvents
Camden	*S81IN101-5-(1-5)	CaB	Camden
Cuba	S80IN101-19-(1-5)	Hd	Haymond, taxadjunct--fine-silty, mixed, acid, mesic Typic Udifluvents
Hosmer	*S79IN101-2-(1-10)	HoB	Hosmer
Markland	*S80IN101-3-(1-5)	MaB	Markland
Martinsville	*S80IN101-11-(1-9)	MdA	Martinsville
McGary	*S81IN101-7-(1-5)	MgA	McGary
Negley	*S80IN101-4-(1-8)	NeE	Negley, taxadjunct--coarse-loamy, mixed, mesic Typic Paleudalfs
Newark	*S80IN101-2-(1-6)	Nm	Newark
Nolin	*S80IN101-3-(1-5)	No	Nolin
Parke	*S80IN101-5-(1-7)	PaC2	Parke
Pekin	*S81IN101-9-(1-5)	PeB	Pekin
Petrolia	S81IN101-8-(1-5)	Bk	Birds, taxadjunct--clay content slightly higher in the lower part of the solum than allowed in Birds

*Typifying pedon of series for Martin County.

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Pike	*S81IN101-9-(1-7)	PkB	Pike, taxadjunct--fine-silty, mixed, mesic Typic Hapludults
Tilsit	S81IN101-1-(1-5)	ZaB	Zanesville, taxadjunct--fine silty, mixed, mesic Typic Fragiudults
Wakeland	*S79IN101-1-(1-6)	Wa	Wakeland
Wellston	*S80IN101-12-(1-6)	WnE	Wellston
Wilbur	*S80IN101-13-(1-6)	Wr	Wilbur
Wirt	*S80IN101-14-(1-5)	Wt	Wirt
Chagrin	S81IN101-5-(1-5)	Wt	Wirt
Zanesville	*S81IN101-4-(1-5)	ZaC2	Zanesville
Zipp	*S81IN101-6-(1-4)	Zp	Zipp

*Typifying pedon of series for Martin County.

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

by
Louie L. Buller

BIRDS SERIES
The Petrolia series was included with the Birds series. Both series as brought to correlation have a silt loam surface layer and have moderately slow permeability. The Birds typical pedon is silt loam throughout while the Petrolia typical pedon is silt loam to 24 inches and has less than 31 percent clay in all layers below 24 inches. The silty clay loam material in the lower part of the Petrolia series should be mentioned in the mapping unit descripion as a similar soil.

BONNIE SERIES
This soil is a taxadjuct to the Bonnie series because the typical pedon has more sand and less clay than typical for the series. The taxadjunct classifies as a coarse-loamy, mixed, acid, mesic Typic Fluvaquents.

BURNSIDE SERIES
The series is a taxadjunct because the typical pedon is more basic in reaction than typical for the series. The taxadjunct classifies as a loamy-skeletal, mixed, nonacid, mesic Typic Udifluvents.

CINCINNATI SERIES
The soil is slightly less acid in the upper part of the solum than typical for the series but is not considered as a taxadjunct.

GILPIN SERIES
Laboratory data was available for the typical pedon but was not used because the coarse fragments appear to have been ground up with the rest of the sample and this produced erroneous results.

HAGERSTOWN SERIES
Eroded was dropped from the Hagerstown silt loam, 12 to 18 percent slopes, eroded mapping unit name, because the typical pedon does not exhibit eroded properties.

HAYMOND SERIES
The soils with a field name of Sharon which were brought to final correlation as Cuba are combined with Haymond. These soils are mapped in close proximity to the coarse-silty Haymond and Wakeland soils and the laboratory data shows the control section averages 18 percent clay. The laboratory data shows the included Cuba soils are acid and this fact will be a similar soil statement in the Haymond mapping unit description.

HOSMER SERIES
The typical pedon is slightly more acid in the fragipan than permitted by the series and has a silty clay layer below 65 inches. It is not a taxadjunct.

MARKLAND SERIES
Both mapping units of Markland have a water table at 3 to 6 feet. Because of this, well drained will be deleted from the pedon description and the mapping unit descriptions.

MCGARY SERIES
There is one mapping unit and it was phased as rarely flooded with 0 to 2 percent slopes. Both phases are not needed and consequently rarely flooded is dropped from the name and the percent slope is retained.

Conference - retained name

NEGLEY SERIES
This soil is a taxadjunct because according to the laboratory data the series control section is coarse-loamy, and the surface texture is silt loam. The taxadjunct classifies as coarse-loamy, mixed, mesic Typic Paleudalfs.

NEWARK SERIES
The reaction in the lower part of the control section and the subsoil is slightly more acid than typical for the series. The soil is not a taxadjunct.

PIKE SERIES
This soil is a taxadjunct. The laboratory data on the typical pedon has 25 percent base saturation below 57 inches and therefore classifies as an Ultisol. The taxadjunct classifies as a fine-silty, mixed, mesic, Typic Hapludults.

UDORTHENTS
The Udorthents in the survey area are well drained and have fine-loamy, fine-silty, or loamy-skeletal family textures. The Udorthents, silty, 6 to 14 percent slopes mapping unit is the sanitary landfills which are covered with about 40 inches of silty material. The Udorthents-Pits complex is associated with the quarries in the survey area and the Udorthents portion is approximately 80 percent skeletal material. The Udorthents mapped in association with the Zanesville and the Wellston series are primarily fine-silty. In view of the variety of textures in Udorthents they are classifed as loamy and loamy-skeletal, mixed, mesic Typic Udorthents.

The Negley-Udorthents complex unit is combined with Wellston-Udorthents complex, 12 to 18 percent slopes because the unit is small in total acres and individual delineations are small. Wellston is mapped adjacent to Negley soils and makes it the logical place to put the unit.

WAKELAND SERIES
The Stendal soils are included with the Wakeland soils. Laboratory data was not available on the Stendal series but the clay content in the correlation samples appeared to be below 18 percent and similar to the clay content in the Wakeland series. The field reaction in the typical pedon and the backup pedons is about 5.4 in the solum which is about one pH class below the Wakeland series. The Wakeland mapping unit description should make mention of areas with the slightly more acid subsoil and substratum.

No - Held on to at Conference

WELLSTON SERIES
The Crider series is included with the Wellston series. There was only one mapping unit with 130 acres in the unit. The individual delineations are 5 to 20 acres in size. The mapping unit is included with Wellston silt loam, 6 to

12 percent slopes. The Wellston mapping unit description already has a similar soil statement about the clayey material in the underlying material and this statement covers the Crider series.

added at Conference on Wash Co.

Eroded is dropped from the Wellston silt loam, 6 to 12 percent slopes, eroded mapping unit. The typical pedon for this mapping unit has a combined surface and subsurface thickness just as thick as the noneroded typical pedon for the series and the 3 inch surface layer is darker in color than the noneroded typical pedon.

Severely eroded is removed from the Wellston-Urdorthents complex, 12 to 18 percent slopes mapping unit name. In complexes the phases used must apply to all components and in this case severely eroded can apply only to the Wellston component. The Udorthents portion of the mapping unit is primarily the result of mechanical manipulation or moving of the soil and not the accelerated wearing away of the earth's surface by water, wind, ice, or other geological agents. The mapping unit description describes the conditions adequately.

ZANESVILLE SERIES

The Tilsit soils are included with the Zanesville soils. In this survey area the Tilsit soils are mapped on B slope and the Zanesville soils are mapped on B and C slopes. The two soils are similar in all respects except the laboratory data on the typical pedon for Zanesville has base saturation above 35 percent at critical depth and the typical pedon for the Tilsit soils has base saturation below 35 percent at critical depth. Field base saturation determinations on a number of pedons of Zanesville and Tilsit show that about half of the pedons of both Zanesville and Tilsit have less than 35 percent base saturation at critical depths and the other half have more than 35 percent base saturation at critical depths. There is more similarity than difference between the Zanesville and Tilsit soils.

The typical Zanesville pedon has slighly lower reaction throughout and lower clay percentage below the control section than allowed in the range of the series but the differences are not enough to call the series a taxadjunct.

Severely eroded was dropped from the two Zanesville-Udorthents mapping unit names for the same reason that severely eroded was dropped from the Wellston-Udorthents mapping unit name.

ZIPP SERIES

Rarely flooded was dropped from the name. The ponding problem is a more frequent and greater problem and would be over shadowed or lost if the rare flooding were highlighted in the name.

CLASSIFICATION OF THE SOIL

Soil Name	Family or Higher Taxonomic Class
Abscota	Mixed, mesic Typic Udipsamments
Alvin	Coarse-loamy, mixed, mesic Typic Hapludalfs
Bartle	Fine-silty, mixed, mesic Aeric Fragiaqualfs
Berks	Loamy-skeletal, mixed, mesic Typic Dystrochrepts
Birds	Fine-silty, mixed, nonacid, mesic Typic Fluvaquents
*Bonnie	Fine-silty, mixed, acid, mesic Typic Fluvaquents
*Burnside	Loamy-skeletal, mixed, acid, mesic Typic Udifluvents
Camden	Fine-silty, mixed, mesic Typic Hapludalfs
Chelsea	Mixed, mesic Alfic Udipsamments
Cincinnati	Fine-silty, mixed, mesic Typic Fragiudalfs
Ebal	Fine, mixed, mesic Ultic Hapludalfs
Fairpoint	Loamy-skeletal, mixed, nonacid, mesic Typic Udorthents
Gilpin	Fine-loamy, mixed, mesic Typic Hapludults
Hagerstown	Fine, mixed, mesic Typic Hapludalfs
Haymond	Coarse-silty, mixed, nonacid, mesic Typic Udifluvents
Hosmer	Fine-silty, mixed, mesic Typic Fragiudalfs
Johnsburg	Fine-silty, mixed, mesic Aquic Fragiudults
Markland	Fine, mixed, mesic Typic Hapludalfs
Martinsville	Fine-loamy, mixed, mesic Typic Hapludalfs
McGary	Fine, mixed, mesic Aeric Ochraqualfs
*Negley	Fine-loamy, mixed, mesic Typic Paleudalfs
Newark	Fine-silty, mixed, nonacid, mesic Aeric Fluvaquents
Nolin	Fine-silty, mixed, mesic Dystric Fluventic Eutrochrepts
Parke	Fine-silty, mixed, mesic Ultic Hapludalfs
Pekin	Fine-silty, mixed, mesic Aquic Fragiudalfs

Soil Name	Family or Higher Taxonomic Class
*Pike	Fine-silty, mixed, mesic Ultic Hapludalfs
Udorthents	Loamy and loamy-skeletal, mixed, mesic Typic Udorthents
Wakeland	Coarse-silty, mixed, nonacid, mesic Aeric Fluvaquents
Wellston	Fine-silty, mixed, mesic Ultic Hapludalfs
Wilbur	Coarse-silty, mixed, nonacid, mesic Aquic Udifluvents
Wirt	Coarse-loamy, mixed, nonacid, mesic Typic Udifluvents
Zanesville	Fine-silty, mixed, mesic Typic Fragiudalfs
Zipp	Fine, mixed, nonacid, mesic Typic Haplaquepts