

## Land Capability Classification

The land capability classification of map units in the survey area is shown in this table. This classification shows, in a general way, the suitability of soils for most kinds of field crops (United States Department of Agriculture, Soil Conservation Service, 1961). Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels: capability class, subclass, and unit.

*Capability classes*, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

- Class 1 soils have slight limitations that restrict their use.
- Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.
- Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
- Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
- Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.
- Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

*Capability subclasses* are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion.

## Report—Land Capability Classification

Land Capability Classification—Vinton County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
AbC—Aaron silt loam, 6 to 15 percent slopes				
	85	Aaron	3e	—
BgC—Berks-Tarhollow complex, 6 to 15 percent slopes				
	55	Berks	3e	—
	30	Tarhollow	3e	—
BhB—Bethesda silty clay loam, 0 to 8 percent slopes				
	90	Bethesda	3s	—
BhC—Bethesda silty clay loam, 8 to 20 percent slopes				
	90	Bethesda	4s	—
BhE—Bethesda silty clay loam, 20 to 40 percent slopes				
	90	Bethesda	6e	—
BmC—Bethesda channery clay loam, 8 to 20 percent slopes				
	85	Bethesda	6s	—
BmE—Bethesda channery clay loam, 20 to 40 percent slopes				
	85	Bethesda	7e	—
BmF—Bethesda channery clay loam, 40 to 70 percent slopes				
	85	Bethesda	7e	—
Bne1AF—Bonnie silt loam, 0 to 2 percent slopes, frequently flooded				
	85	Bonnie	3w	—
Bne1AP—Bonnie silt loam, ponded, 0 to 2 percent slopes				
	85	Bonnie	5w	—
Cg—Chagrin silt loam, 0 to 3 percent slopes, frequently flooded				
	85	Chagrin	2w	—

Land Capability Classification--Vinton County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
ChA—Chavies silt loam, 0 to 2 percent slopes, rarely flooded				
	85	Chavies	1	—
ChB—Chavies silt loam, 2 to 6 percent slopes, rarely flooded				
	85	Chavies	2e	—
CmC—Chavies silt loam, 6 to 15 percent slopes				
	85	Chavies	3e	—
Cp—Clifty silt loam, occasionally flooded				
	85	Clifty	2s	—
CrC—Clymer silt loam, 8 to 15 percent slopes				
	85	Clymer	3e	—
Cub1AO—Cuba silt loam, 0 to 3 percent slopes, occasionally flooded				
	90	Cuba	2w	—
CwD—Cruze silt loam, 12 to 20 percent slopes				
	90	Cruze	4e	—
CwE—Cruze silt loam, 20 to 35 percent slopes				
	90	Cruze	6e	—
DkF—DeKalb-Shelocta-Rock outcrop complex, 40 to 70 percent slopes				
	50	DeKalb	7e	—
	20	Shelocta	7e	—
	15	Rock outcrop	—	—
Dol1A1—Doles silt loam, 0 to 2 percent slopes				
	85	Doles	2w	—
DtD—DeKalb-Westmoreland complex, 15 to 25 percent slopes				
	55	DeKalb	4e	—
	35	Westmoreland	4e	—
DtF—DeKalb-Westmoreland complex, 40 to 70 percent slopes				
	55	DeKalb	7e	—
	35	Westmoreland	7e	—
Dy—Dumps, mine				
	90	Dumps, mine	—	—
ErC—Ernest silt loam, 6 to 15 percent slopes				
	85	Ernest	3e	—

Land Capability Classification--Vinton County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
ErD—Ernest silt loam, 15 to 25 percent slopes				
	85	Ernest	4e	—
EsC—Ernest silt loam, 8 to 15 percent slopes				
	80	Ernest	3e	—
FaB—Fairpoint clay loam, 0 to 8 percent slopes				
	85	Fairpoint	3s	—
FaC—Fairpoint clay loam, 8 to 20 percent slopes				
	85	Fairpoint	4s	—
FcA—Fitchville silt loam, 0 to 3 percent slopes				
	85	Fitchville	2w	—
GaC—Germano-Gilpin complex, 6 to 15 percent slopes				
	50	Germano	3e	—
	40	Gilpin	3e	—
GaD—Germano-Gilpin complex, 15 to 25 percent slopes				
	40	Germano	4e	—
	35	Gilpin	4e	—
GaE—Germano-Gilpin complex, 25 to 40 percent slopes				
	65	Germano	6e	—
	15	Gilpin	6e	—
GcC—Gilpin-Aaron complex, 6 to 15 percent slopes				
	50	Gilpin	3e	—
	25	Aaron	3e	—
GdC2—Gilpin silt loam, 8 to 15 percent slopes				
	80	Gilpin	3e	—
GgD—Gilpin-Guernsey complex, 15 to 25 percent slopes				
	50	Gilpin	4e	—
	30	Guernsey	4e	—
GgE—Gilpin-Guernsey complex, 25 to 40 percent slopes				
	50	Gilpin	6e	—
	35	Guernsey	6e	—

Land Capability Classification--Vinton County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
GgF—Gilpin-Guernsey complex, 40 to 70 percent slopes				
	50	Gilpin	7e	—
	35	Guernsey	7e	—
GIR1C1—Gilpin-Rarden silt loams, 6 to 15 percent slopes				
	50	Gilpin	3e	—
	35	Rarden	4e	—
GIR1D1—Gilpin-Rarden silt loams, 15 to 25 percent slopes				
	50	Gilpin	4e	—
	30	Rarden	6e	—
GIR1E1—Gilpin-Rarden silt loams, 25 to 40 percent slopes				
	50	Gilpin	6e	—
	30	Rarden	7e	—
GmC—Gilpin-Tarhollow complex, 6 to 15 percent slopes				
	45	Gilpin	3e	—
	30	Tarhollow	3e	—
GnA—Glenford silt loam, 0 to 3 percent slopes				
	85	Glenford	1	—
GnB—Glenford silt loam, 3 to 8 percent slopes				
	85	Glenford	2e	—
LhW1D2—Latham-Wharton silt loams, 15 to 25 percent slopes, eroded				
	45	Latham	6e	—
	35	Wharton	4e	—
Lic1B1—Licking silt loam, 2 to 6 percent slopes				
	85	Licking	2e	—
Lic1C2—Licking silt loam, 6 to 12 percent slopes, eroded				
	85	Licking	4e	—
Lic1D2—Licking silt loam, 12 to 18 percent slopes, eroded				
	85	Licking	6e	—
McA—McGary silty clay loam, 0 to 2 percent slopes				
	85	Mcgary	3w	—

Land Capability Classification--Vinton County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
New1AF—Newark silt loam, 0 to 3 percent slopes, frequently flooded				
	90	Newark	2w	—
Omu1A1—Omulga silt loam, 0 to 2 percent slopes				
	85	Omulga	2w	—
Omu1B1—Omulga silt loam, 2 to 6 percent slopes				
	85	Omulga	2e	—
Omu1C1—Omulga silt loam, 6 to 12 percent slopes				
	85	Omulga	3e	—
OnC2—Omulga silt loam, 6 to 12 percent slopes, eroded				
	90	Omulga	3e	—
Or—Orrville silt loam, frequently flooded				
	85	Orrville	2w	—
Ph—Philo silt loam, frequently flooded				
	85	Philo	2w	—
Phi1AF—Philo silt loam, 0 to 3 percent slopes, frequently flooded				
	85	Philo	2w	—
Pio1AF—Piopolis silt loam, 0 to 2 percent slopes, frequently flooded				
	85	Piopolis	3w	—
Pm—Piopolis silt loam, frequently flooded				
	85	Piopolis	3w	—
Pn—Pope loam, occasionally flooded				
	85	Pope	2w	—
Po—Pope loam, frequently flooded				
	85	Pope	2w	—
Pop1AF—Pope silt loam, 0 to 3 percent slopes, frequently flooded				
	85	Pope	2w	—
Pop6AF—Pope fine sandy loam, 0 to 3 percent slopes, frequently flooded				
	85	Pope	2w	—

Land Capability Classification--Vinton County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
PpS1AF--Pope-Stokly silt loams, 0 to 3 percent, frequently flooded				
	45	Pope	2w	—
	40	Stokly	2w	—
Rar1C2--Rarden silt loam, 8 to 15 percent slopes, eroded				
	85	Rarden	4e	—
RcD--Richland loam, 15 to 25 percent slopes				
	85	Richland	4e	—
RcE--Richland loam, 25 to 40 percent slopes				
	85	Richland	6e	—
RrW1C2--Rarden-Wharton silt loams, 8 to 15 percent slopes, eroded				
	45	Rarden	4e	—
	40	Wharton	3e	—
RrW1D2--Rarden-Wharton silt loams, 15 to 25 percent slopes, eroded				
	45	Wharton	4e	—
	45	Rarden	6e	—
SaC--Shelocta silt loam, 8 to 15 percent slopes				
	80	Shelocta	3e	—
SaD--Shelocta silt loam, 15 to 25 percent slopes				
	85	Shelocta	6e	—
SbE--Sewell channery fine sandy loam, 20 to 40 percent slopes				
	85	Sewell	7e	—
ScD--Shelocta-Cruze silt loams, 15 to 25 percent slopes				
	45	Shelocta	4e	—
	35	Cruze	4e	—
ScE--Shelocta-Cruze silt loams, 25 to 40 percent slopes				
	55	Shelocta	7e	—
	30	Cruze	6e	—
SdF--Shelocta-Brownsville association, very steep				
	50	Shelocta	7e	—
	30	Brownsville	7e	—

Land Capability Classification--Vinton County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
SfE—Shelocta-Berks complex, 25 to 40 percent slopes				
	60	Shelocta	7e	—
	20	Berks	6e	—
ShLZE1—Shelocta-Latham association, steep				
	50	Shelocta	7e	—
	25	Latham	6e	—
ShRZE1—Shelocta-Rarden association, steep				
	50	Shelocta	7e	—
	25	Rarden	7e	—
Sk—Skidmore gravelly loam, frequently flooded				
	85	Skidmore	3s	—
SkP1AF—Stokly-Philo silt loams, 0 to 3 percent slopes, frequently flooded				
	55	Stokly	2w	—
	30	Philo	2w	—
SsE—Steinsburg sandy loam, 25 to 40 percent slopes				
	85	Steinsburg	7e	—
StE—Steinsburg-Gilpin association, steep				
	55	Steinsburg	7e	—
	15	Gilpin	6e	—
StF—Steinsburg-Gilpin association, very steep				
	55	Steinsburg	7e	—
	20	Gilpin	7e	—
SvE—Steinsburg-Clymer association, steep				
	60	Steinsburg	7e	—
	20	Clymer	7e	—
TaB—Tarhollow silt loam, 2 to 6 percent slopes				
	85	Tarhollow	2e	—
TeB—Tilsit silt loam, 3 to 8 percent slopes				
	85	Tilsit	2e	—
Tg—Tioga fine sandy loam, frequently flooded				
	85	Tioga	2w	—
Ud—Udorthents				
	100	Udorthents	—	—

Land Capability Classification--Vinton County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
W—Water				
	100	Water	—	—
WbC—Wellston silt loam, 8 to 15 percent slopes				
	85	Wellston	3e	—
WdC—Wellston silt loam, 8 to 15 percent slopes				
	85	Wellston	3e	—
WeB—Westmore silt loam, 3 to 8 percent slopes				
	100	Westmore	2e	—
WhL1C1—Wharton-Latham silt loams, 6 to 15 percent slopes				
	30	Wharton	3e	—
	25	Latham	4e	—
WhL1D1—Wharton-Latham silt loams, 15 to 25 percent slopes				
	55	Wharton	4e	—
	25	Latham	6e	—
WhL1E1—Wharton-Latham silt loams, 25 to 40 percent slopes				
	65	Wharton	6e	—
	25	Latham	6e	—
Wya1B1—Wyatt silt loam, 2 to 6 percent slopes				
	85	Wyatt	3e	—
Wya3C2—Wyatt silty clay loam, 6 to 12 percent slopes, eroded				
	85	Wyatt	4e	—
Wya3D2—Wyatt silty clay loam, 12 to 18 percent slopes, eroded				
	85	Wyatt	6e	—
ZnB—Zanesville silt loam, 2 to 6 percent slopes				
	85	Zanesville	2e	—
ZoB—Zanesville silt loam, 3 to 8 percent slopes				
	100	Zanesville	2e	—

## Data Source Information

Soil Survey Area: Vinton County, Ohio  
Survey Area Data: Version 13, Sep 19, 2014