

## 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--Warren County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
AbA—Abscota sand, calcareous variant				
	100	Abscota variant	4s	—
AfB—Alford silt loam, till substratum, 1 to 4 percent slopes				
	100	Alford	2e	—
Ag—Algiers silt loam				
	95	Algiers	2w	—
AwA—Avonburg-Urban land complex, 0 to 2 percent slopes				
	45	Avonburg	—	—
	40	Urban land	—	—
BbB—Birkbeck silt loam, 1 to 4 percent slopes				
	95	Birkbeck	2e	—
Bl <sub>n</sub> 3A—Blanchester silty clay loam, 0 to 1 percent slopes				
	90	Blanchester	3w	—
BoD—Bonnell silt loam, 15 to 25 percent slopes				
	85	Bonnell	6e	—
BoE—Bonnell silt loam, 25 to 35 percent slopes				
	85	Bonnell	6e	—
Br—Brookston silty clay loam, fine-silty, 0 to 2 percent slopes				
	90	Brookston	2w	—
CcB2—Casco loam, 2 to 6 percent slopes, moderately eroded				
	100	Casco	3e	—
CcC2—Casco loam, 6 to 12 percent slopes, moderately eroded				
	100	Casco	4e	—
CdD2—Casco-Rodman complex, 12 to 18 percent slopes, moderately eroded				
	75	Casco	6e	—
	25	Rodman	4s	—

Land Capability Classification--Warren County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
CeE2—Casco silt loam, 18 to 50 percent slopes, eroded				
	85	Casco	7e	—
Cle1A—Clermont silt loam, 0 to 1 percent slopes				
	90	Clermont	3w	—
CmC2—Cincinnati silt loam, 8 to 15 percent slopes, eroded				
	85	Cincinnati	3e	—
CnB—Cincinnati silt loam, 2 to 6 percent slopes				
	93	Cincinnati	2e	—
CnB2—Cincinnati silt loam, 2 to 6 percent slopes, moderately eroded				
	93	Cincinnati	2e	—
CnC2—Cincinnati silt loam, 6 to 12 percent slopes, moderately eroded				
	95	Cincinnati	3e	—
CqC2—Crouse-Miamian silt loams, 6 to 12 percent slopes, eroded				
	60	Crouse	3e	—
	30	Miamian	3e	—
CrB—Crider silt loam, 2 to 6 percent slopes				
	100	Crider	2e	—
Cu—Cut and fill land				
	100	Cut and fill land	—	—
DaA—Dana silt loam, 0 to 2 percent slopes				
	95	Dana	1	—
DaB—Dana silt loam, 2 to 6 percent slopes				
	95	Dana	2e	—
EbF—Eden flaggy silty clay loam, 40 to 60 percent slopes				
	90	Eden	7e	—
EdB2—Eden complex, 2 to 6 percent slopes, moderately eroded				
	70	Eden	3e	—
EdC2—Eden complex, 6 to 12 percent slopes, moderately eroded				
	70	Eden	3e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
EdD2—Eden complex, 12 to 18 percent slopes, moderately eroded				
	100	Eden	4e	—
EdE2—Eden complex, 18 to 25 percent slopes, moderately eroded				
	70	Eden	6e	—
EdF2—Eden complex, 25 to 35 percent slopes, moderately eroded				
	70	Eden	7e	—
Ee—Eel loam				
	95	Eel	2w	—
FaE2—Fairmount-Eden flaggy silty clay loams, 12 to 25 percent slopes, moderately eroded				
	70	Fairmount	6e	—
	30	Eden	4e	—
FaF2—Fairmount-Eden flaggy silty clay loams, 25 to 50 percent slopes, moderately eroded				
	70	Fairmount	7e	—
	30	Eden	7e	—
FhA—Fincastle silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes				
	85	Fincastle	2w	—
FhB—Fincastle silt loam, 2 to 6 percent slopes				
	95	Fincastle	2e	—
FiB—Fincastle silt loam, 2 to 4 percent slopes				
	90	Fincastle	2e	—
FIA—Fox loam, 0 to 2 percent slopes				
	100	Fox	2s	—
FIB—Fox loam, 2 to 6 percent slopes				
	100	Fox	2e	—
FIB2—Fox loam, 2 to 6 percent slopes, moderately eroded				
	100	Fox	2e	—
FIC2—Fox loam, 6 to 12 percent slopes, moderately eroded				
	100	Fox	3e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
FoD2—Fox-Casco complex, 12 to 18 percent slopes, moderately eroded				
	50	Casco	6e	—
	50	Fox	4e	—
Gd—Genesee fine sandy loam				
	95	Genesee	2w	—
Gn—Genesee loam				
	95	Genesee	2w	—
Gp—Gravel pits				
	100	Gravel pits	—	—
HeF—Hennepin silt loam, 25 to 35 percent slopes				
	100	Hennepin	7e	—
HeF2—Hennepin silt loam, 25 to 35 percent slopes, moderately eroded				
	80	Hennepin	7e	—
HiD2—Hickory silt loam, 12 to 18 percent slopes, eroded				
	85	Hickory	3e	—
HiE2—Hickory silt loam, 18 to 25 percent slopes, eroded				
	85	Hickory	6e	—
HiF2—Hickory silt loam, 25 to 35 percent slopes, eroded				
	85	Hickory	7e	—
HmE—Hennepin-Miamian silt loams, 18 to 25 percent slopes				
	75	Hennepin	6e	—
	25	Miamian	6e	—
HmE2—Hennepin-Miamian silt loams, 18 to 25 percent slopes, moderately eroded				
	75	Hennepin	6e	—
	25	Miamian	6e	—
HnD3—Hennepin-Miamian complex, 12 to 18 percent slopes, severely eroded				
	70	Hennepin	7e	—
	30	Miamian	6e	—
HoB—Henshaw silt loam, 1 to 4 percent slopes				
	95	Henshaw	2e	—

Land Capability Classification--Warren County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
HrB2—Hickory silt loam, 2 to 6 percent slopes, moderately eroded				
	100	Hickory	2e	—
HrC2—Hickory silt loam, 6 to 12 percent slopes, moderately eroded				
	100	Hickory	3e	—
HrD2—Hickory silt loam, 12 to 18 percent slopes, moderately eroded				
	100	Hickory	4e	—
HsC3—Hickory clay loam, 6 to 12 percent slopes, severely eroded				
	100	Hickory	4e	—
HsD3—Hickory clay loam, 12 to 18 percent slopes, severely eroded				
	100	Hickory	6e	—
HtE2—Hickory-Fairmount complex, 18 to 25 percent slopes, moderately eroded				
	70	Hickory	6e	—
	30	Fairmount	6e	—
HtF2—Hickory-Fairmount complex, 25 to 50 percent slopes, moderately eroded				
	70	Hickory	7e	—
	30	Fairmount	7e	—
HuE2—Hickory-Morrisville silt loams, 18 to 25 percent slopes, eroded				
	60	Hickory	6e	—
	30	Morrisville	6e	—
IvA—Iva silt loam, till substratum, 0 to 2 percent slopes				
	90	Iva	2w	—
JoR1A1—Jonesboro-Rossmoyne silt loams, 0 to 2 percent slopes				
	50	Jonesboro	2w	—
	35	Rossmoyne	2w	—
JoR1B1—Jonesboro-Rossmoyne silt loams, 2 to 6 percent slopes				
	50	Jonesboro	2e	—
	45	Rossmoyne	2e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
JoR1B2—Jonesboro-Rossmoyne silt loams, 2 to 6 percent slopes, eroded				
	52	Jonesboro, eroded	2e	—
	42	Rossmoyne, eroded	2e	—
JrC2—Jonesboro-Rossmoyne silt loams, 6 to 12 percent slopes, eroded				
	65	Jonesboro	3e	—
	20	Rossmoyne	3e	—
KeB—Kendallville loam, 2 to 6 percent slopes				
	100	Kendallville	2e	—
KeC2—Kendallville loam, 6 to 12 percent slopes, moderately eroded				
	100	Kendallville	3e	—
Kg—Kings silty clay loam, thick surface variant				
	100	Kings variant	2w	—
Lg—Lanier sandy loam				
	98	Lanier	2w	—
LiB—Libre silt loam, 2 to 6 percent slopes				
	90	Libre	2e	—
LoC2—Loudon silt loam, 6 to 12 percent slopes, eroded				
	90	Loudon	3e	—
LuF2—Lumberton silt loam, 25 to 50 percent slopes, eroded				
	80	Lumberton	7e	—
MmB3—Miamian clay loam, 2 to 6 percent slopes, severely eroded				
	95	Miamian	3e	—
MmC3—Miamian clay loam, 6 to 12 percent slopes, severely eroded				
	90	Miamian, severely eroded	4e	—
MnD2—Miamian-Hennepin silt loams, 12 to 18 percent slopes, moderately eroded				
	60	Miamian	4e	—
	30	Hennepin	6e	—
MrC2—Miamian-Russell silt loams, 6 to 12 percent slopes, moderately eroded				
	65	Miamian	3e	—
	33	Russell	3e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
MsC2—Miamiian silt loam, 6 to 12 percent slopes, eroded				
	85	Miamian	3e	—
MsD2—Miamiian silt loam, 12 to 18 percent slopes, eroded				
	95	Miamian	4e	—
MtF2—Miamiian-Thrifton complex, 25 to 50 percent slopes, eroded				
	70	Miamian	7e	—
	25	Thrifton	7e	—
Mu—Muck				
	100	Muck	5w	—
OcA—Ockley silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes				
	85	Ockley	1	—
OcB—Ockley silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes				
	85	Ockley	2e	—
OcB2—Ockley silt loam, 2 to 6 percent slopes, moderately eroded				
	100	Ockley	2e	—
PaB—Parke silt loam, 2 to 6 percent slopes				
	100	Parke	2e	—
PaD2—Parke silt loam, 6 to 18 percent slopes, moderately eroded				
	100	Parke	4e	—
Pb—Patton silt loam, silted				
	85	Patton	2w	—
Pc—Patton silty clay loam				
	85	Patton	2w	—
PIB—Plattville silt loam, 1 to 6 percent slopes				
	95	Plattville	2e	—
PrB—Princeton fine sandy loam, 2 to 6 percent slopes				
	100	Princeton	2e	—
PrC2—Princeton fine sandy loam, 6 to 12 percent slopes, moderately eroded				
	100	Princeton	3e	—

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			Nonirrigated	Irrigated
Ra—Ragsdale silty clay loam				
	95	Ragsdale	2w	—
RbA—Rainsboro silt loam, 0 to 2 percent slopes				
	100	Rainsboro	2w	—
RbB—Rainsboro silt loam, 2 to 6 percent slopes				
	100	Rainsboro	2e	—
Re—Reesville silt loam, 0 to 2 percent slopes				
	90	Reesville	2w	—
Rh—Riverwash				
	100	Riverwash	—	—
RkE2—Rodman and Casco gravelly loams, 18 to 25 percent slopes, moderately eroded				
	50	Casco	7e	—
	50	Rodman	7s	—
RmA—Ross loam, 0 to 1 percent slopes, occasionally flooded				
	95	Ross	2w	—
Rn—Ross loam				
	95	Ross	2w	—
RoC2—Rossmoyne silt loam, 8 to 15 percent slopes, eroded				
	85	Rossmoyne	3e	—
RpC2—Rossmoyne silt loam, 6 to 12 percent slopes, moderately eroded				
	97	Rossmoyne	3e	—
RsB3—Rossmoyne silty clay loam, 2 to 6 percent slopes, severely eroded				
	95	Rossmoyne	2e	—
RsC3—Rossmoyne silty clay loam, 6 to 12 percent slopes, severely eroded				
	98	Rossmoyne	4e	—
RvA—Russell-Miamian silt loams, 0 to 2 percent slopes				
	60	Russell	1	—
	35	Miamian	1	—

Land Capability Classification--Warren County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
RvB—Russell-Miamian silt loams, 2 to 6 percent slopes				
	65	Russell	2e	—
	30	Miamian	2e	—
RvB2—Russell-Miamian silt loams, 2 to 6 percent slopes, moderately eroded				
	50	Russell	2e	—
	45	Miamian	2e	—
RxB2—Russell-Xenia silt loams, 2 to 6 percent slopes, eroded				
	60	Russell	2e	—
	20	Xenia	2e	—
Sec1A—Secondcreek silt loam, 0 to 1 percent slopes, overwash				
	90	Secondcreek, drained	2w	—
Sec3A—Secondcreek silty clay loam, 0 to 1 percent slopes				
	93	Secondcreek, drained	2w	—
Sh—Shoals silt loam				
	95	Shoals	2w	—
SIA—Sligo silt loam, 0 to 1 percent slopes, occasionally flooded				
	90	Sligo	2w	—
SnA—Sloan silt loam, sandy substratum, 0 to 1 percent slopes, occasionally flooded				
	90	Sloan	3w	—
So—Sloan silty clay loam				
	95	Sloan	3w	—
St—Stonelick fine sandy loam, frequently flooded				
	95	Stonelick	3w	—
SyA—Stringley-Sligo loams, 0 to 2 percent slopes, occasionally flooded				
	60	Stringley	2w	—
	30	Sligo	2w	—
TpA—Treaty silt loam, 0 to 1 percent slopes, overwash				
	90	Treaty	2w	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
TrA—Treaty silty clay loam, 0 to 1 percent slopes				
	90	Treaty	2w	—
Ud—Udorthents				
	100	Udorthents	—	—
UnB—Uniontown silt loam, 1 to 6 percent slopes				
	95	Uniontown	2e	—
W—Water				
	100	Water	—	—
WaA—Warsaw loam, 0 to 2 percent slopes				
	100	Warsaw	2s	—
WaB—Warsaw loam, 2 to 6 percent slopes				
	100	Warsaw	2e	—
WcC3—Wapahani-Miamian clay loams, 6 to 12 percent slopes, severely eroded				
	70	Wapahani	4e	—
	20	Miamian	4e	—
WeA—Wea silt loam, 0 to 2 percent slopes				
	100	Wea	1	—
WIA—Williamsburg silt loam, 0 to 2 percent slopes				
	100	Williamsburg	1	—
WIB—Williamsburg silt loam, 2 to 6 percent slopes				
	100	Williamsburg	2e	—
WIC2—Williamsburg silt loam, 6 to 12 percent slopes, moderately eroded				
	100	Williamsburg	3e	—
WsS1A1—Westboro-Schaffer silt loams, 0 to 2 percent slopes				
	55	Westboro	2w	—
	30	Schaffer	2w	—
WsS1B1—Westboro-Schaffer silt loams, 2 to 4 percent slopes				
	55	Westboro	2w	—
	30	Schaffer	2w	—
WyB—Wynn silt loam, 2 to 6 percent slopes				
	100	Wynn	2e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
WyB2—Wynn silt loam, 2 to 6 percent slopes, moderately eroded				
	100	Wynn	2e	—
WyC2—Wynn silt loam, 6 to 12 percent slopes, moderately eroded				
	100	Wynn	3e	—
WyC3—Wynn silt loam, 6 to 12 percent slopes, severely eroded				
	100	Wynn	4e	—
XeA—Xenia silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes				
	85	Xenia	1	—
XeB—Xenia silt loam, 2 to 6 percent slopes				
	95	Xenia	2e	—
XeB2—Xenia silt loam, 2 to 6 percent slopes, moderately eroded				
	95	Xenia	2e	—

### Data Source Information

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