

## 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—Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
AwA—Avonburg-Urban land complex, 0 to 2 percent slopes				
	45	Avonburg	—	—
	40	Urban land	—	—
Bt—Brenton silt loam				
	90	Brenton	2w	—
CdD2—Casco and Rodman gravelly loams, 6 to 18 percent slopes, moderately eroded				
	60	Casco	4e	—
	30	Rodman	4s	—
CdE—Casco and Rodman gravelly loams, 18 to 35 percent slopes				
	55	Casco	7e	—
	30	Rodman	7s	—
CeB—Celina silt loam, 2 to 6 percent slopes				
	85	Celina	2e	—
CeB2—Celina silt loam, 2 to 6 percent slopes, eroded				
	85	Celina	2e	—
CnC2—Cincinnati silt loam, 6 to 12 percent slopes, moderately eroded				
	90	Cincinnati	3e	—
CrA—Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes				
	90	Crosby	2w	—
CtA—Crosby-Celina silt loams, 0 to 2 percent slopes				
	60	Crosby	2w	—
	30	Celina	1	—
CtB—Crosby-Celina silt loams, 2 to 4 percent slopes				
	50	Crosby	2e	—
	40	Celina	2e	—

Land Capability Classification--Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
CvA—Cyclone silt loam, 0 to 2 percent slopes				
	85	Cyclone	2w	—
DaA—Dana silt loam, 0 to 2 percent slopes				
	90	Dana	1	—
DaB—Dana silt loam, 2 to 6 percent slopes				
	90	Dana	2e	—
DbB—Dana silt loam, bedrock substratum, 2 to 8 percent slopes				
	85	Dana	2e	—
EcE2—Eden silty clay loam, 15 to 25 percent slopes, moderately eroded				
	90	Eden	6e	—
EcF2—Eden silty clay loam, 25 to 50 percent slopes, moderately eroded				
	90	Eden	7e	—
EdB—Eden-Urban land complex, 3 to 8 percent slopes				
	60	Eden	—	—
	30	Urban land	—	—
EdC—Eden-Urban land complex, 8 to 15 percent slopes				
	55	Eden	—	—
	30	Urban land	—	—
Ee—Eel silt loam				
	85	Eel	2w	—
EIA—Eldean loam, 0 to 2 percent slopes				
	90	Eldean	2s	—
EIB—Eldean loam, 2 to 6 percent slopes				
	90	Eldean	2e	—
EIB2—Eldean loam, 2 to 6 percent slopes, moderately eroded				
	95	Eldean	2e	—
EIC2—Eldean loam, 6 to 12 percent slopes, moderately eroded				
	90	Eldean	3e	—
EnA—Eldean gravelly loam, 0 to 2 percent slopes				
	95	Eldean	2s	—

Land Capability Classification--Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
EnB2—Eldean gravelly loam, 2 to 6 percent slopes, moderately eroded				
	95	Eldean	2e	—
EuA—Eldean-Urban land complex, nearly level				
	45	Eldean	—	—
	30	Urban land	—	—
EuB—Eldean-Urban land complex, gently sloping				
	55	Eldean	—	—
	35	Urban land	—	—
FcA—Fincastle silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes				
	85	Fincastle	2w	—
FcB—Fincastle silt loam, 2 to 6 percent slopes				
	95	Fincastle	2e	—
FdA—Fincastle silt loam, bedrock substratum, 0 to 2 percent slopes				
	90	Fincastle	2w	—
FdB—Fincastle silt loam, bedrock substratum, 2 to 6 percent slopes				
	90	Fincastle	2e	—
FeA—Fincastle-Urban land complex, 0 to 2 percent slopes				
	60	Fincastle	—	—
	30	Urban land	—	—
Gn—Genesee loam				
	85	Genesee	2w	—
Go—Genesee-Urban land complex				
	55	Genesee	—	—
	35	Urban land	—	—
HeE2—Hennepin-Miamian silt loams, 18 to 25 percent slopes, moderately eroded				
	60	Hennepin	6e	—
	25	Miamian	6e	—
HeF—Hennepin-Miamian silt loams, 25 to 50 percent slopes				
	60	Hennepin	7e	—
	25	Miamian	7e	—

Land Capability Classification--Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
HeF2--Hennepin-Miamian silt loams, 25 to 50 percent slopes, eroded				
	55	Hennepin	7e	—
	45	Miamian	7e	—
HoA--Henshaw silt loam, 0 to 2 percent slopes				
	85	Henshaw	2w	—
HwE2--Hennepin-Wynn silt loams, 18 to 25 percent slopes, eroded				
	55	Hennepin	6e	—
	40	Wynn	6e	—
HwF2--Hennepin-Wynn silt loams, 25 to 50 percent slopes, eroded				
	55	Hennepin	7e	—
	40	Wynn	7e	—
JoR1B1--Jonesboro-Rossmoyne silt loams, 2 to 6 percent slopes				
	50	Jonesboro	2e	—
	45	Rossmoyne	2e	—
JoR1B2--Jonesboro-Rossmoyne silt loams, 2 to 6 percent slopes, eroded				
	52	Jonesboro, eroded	2e	—
	42	Rossmoyne, eroded	2e	—
KeC2--Kendallville-Eldean silt loams, 6 to 12 percent slopes, eroded				
	60	Kendallville	3e	—
	30	Eldean	3e	—
KeD2--Kendallville-Eldean silt loams, 12 to 18 percent slopes, eroded				
	50	Kendallville	4e	—
	30	Eldean	4e	—
KnA--Kokomo silt loam, 0 to 1 percent slopes				
	90	Kokomo	2w	—
KoA--Kokomo silty clay loam, 0 to 1 percent slopes				
	90	Kokomo	2w	—
La--Landes sandy loam				
	85	Landes	2s	—
Lg--Lanier fine sandy loam				
	95	Lanier	2w	—

Land Capability Classification--Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Lh--Lanier sandy loam, occasionally flooded				
	97	Lanier	2w	—
MaB--Markland silty clay loam, 2 to 6 percent slopes				
	90	Markland	3e	—
McA--Martinsville silt loam, 0 to 2 percent slopes				
	85	Martinsville	1	—
MkC2--Miamian silt loam, 8 to 15 percent slopes, eroded				
	85	Miamian	3e	—
MIB2--Miamian silt loam, 2 to 6 percent slopes, eroded				
	85	Miamian, eroded	2e	—
MIC2--Miamian silt loam, 6 to 12 percent slopes, moderately eroded				
	90	Miamian	3e	—
MID2--Miamian silt loam, 12 to 18 percent slopes, moderately eroded				
	90	Miamian	4e	—
MnC3--Miamian clay loam, shallow to dense till substratum, 6 to 12 percent slopes, severely eroded				
	90	Miamian, severely eroded	4e	—
MnD3--Miamian clay loam, 12 to 18 percent slopes, severely eroded				
	80	Miamian	6e	—
MoB2--Miamian-Celina silt loams, 2 to 6 percent slopes, eroded				
	60	Miamian	2e	—
	30	Celina	2e	—
MoD2--Miamian-Hennepin silt loams, 15 to 25 percent slopes, eroded				
	50	Miamian	6e	—
	30	Hennepin	6e	—
MpE2--Miamian-Hennepin silt loams, 18 to 25 percent slopes, eroded				
	70	Miamian	6e	—
	30	Hennepin	6e	—

Land Capability Classification--Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
MrC3--Miamiian-Losantville clay loams, 6 to 12 percent slopes, severely eroded				
	60	Miamian	4e	—
	30	Losantville	4e	—
MrD3--Miamiian-Losantville clay loams, 12 to 18 percent slopes, severely eroded				
	60	Miamian	6e	—
	30	Losantville	6e	—
MsC2--Miamiian-Russell silt loams, 6 to 12 percent slopes, moderately eroded				
	60	Miamian	3e	—
	30	Russell	3e	—
MsD2--Miamiian-Russell silt loams, 12 to 18 percent slopes, moderately eroded				
	60	Miamian	4w	—
	20	Russell	4w	—
MtC2--Miamiian-Russell silt loams, bedrock substratum, 6 to 12 percent slopes, moderately eroded				
	60	Miamian	3e	—
	30	Russell	3e	—
MuC--Miamiian-Urban land complex, sloping				
	50	Miamian	—	—
	25	Urban land	—	—
MvA--Milford silty clay loam, 0 to 2 percent slopes				
	100	Milford	2w	—
MvC--Miamiian-Urban land complex, 8 to 15 percent slopes				
	50	Miamian	—	—
	35	Urban land	—	—
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	—
Pa--Patton silty clay loam				
	80	Patton	2w	—

Land Capability Classification--Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Pg—Pits, gravel				
	100	Pits	—	—
PrB—Princeton sandy loam, 2 to 8 percent slopes				
	80	Princeton	2e	—
PtB—Princeton sandy loam, 2 to 6 percent slopes				
	100	Princeton	2e	—
Ra—Ragsdale silty clay loam				
	85	Ragsdale	2w	—
RbB2—Rainsville silt loam, 2 to 6 percent slopes, eroded				
	85	Rainsville	2e	—
RdA—Raub silt loam, 0 to 2 percent slopes				
	90	Raub	2w	—
RdB—Raub silt loam, 2 to 6 percent slopes				
	90	Raub	2e	—
Rh—Riverwash				
	100	Riverwash	—	—
Rn—Ross loam				
	85	Ross	2w	—
RoA—Rossburg silt loam, moderately wet, sandy substratum, 0 to 1 percent slopes, occasionally flooded				
	85	Rossburg	2w	—
RsB2—Russell silt loam, 3 to 8 percent slopes, eroded				
	85	Russell	2e	—
RtB—Russell silt loam, 2 to 6 percent slopes				
	90	Russell	2e	—
RvB—Russell-Miamian silt loams, 2 to 6 percent slopes				
	50	Russell	2e	—
	30	Miamian	2e	—
RvB2—Russell-Miamian silt loams, 2 to 6 percent slopes, moderately eroded				
	50	Russell	2e	—
	30	Miamian	2e	—

Land Capability Classification--Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
RwB—Russell-Miamian silt loams, bedrock substratum, 2 to 6 percent slopes				
	50	Russell	2e	—
	30	Miamian	2e	—
RwB2—Russell-Miamian silt loams, bedrock substratum, 2 to 6 percent slopes, moderately eroded				
	50	Russell, bedrock substratum	2e	—
	30	Miamian	2e	—
RxB—Russell-Urban land complex, gently sloping				
	55	Russell	—	—
	30	Urban land	—	—
RzB—Russell-Urban land complex, 3 to 8 percent slopes				
	60	Russell	—	—
	25	Urban land	—	—
Sh—Shoals silt loam				
	85	Shoals	2w	—
SIA—Sleeth silt loam, 0 to 2 percent slopes				
	80	Sleeth	2w	—
St—Stonelick fine sandy loam				
	90	Stonelick	2w	—
SwA—Stonelick loam, gravelly substratum, 0 to 1 percent slopes, frequently flooded				
	90	Stonelick	3w	—
ThA—Thackery silt loam, 0 to 2 percent slopes				
	90	Thackery	1	—
TpA—Tippecanoe silt loam, 0 to 2 percent slopes				
	90	Tippecanoe	2s	—
Ud—Udorthents				
	100	Udorthents	—	—
Uf—Udorthents and Dumps				
	50	Dumps	—	—
	50	Udorthents	—	—
UnA—Uniontown silt loam, 0 to 2 percent slopes				
	95	Uniontown	1	—

Land Capability Classification--Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
UnB—Uniontown silt loam, 2 to 6 percent slopes				
	85	Uniontown	2e	—
UpA—Urban land-Eldean complex, nearly level				
	55	Urban land	—	—
	35	Eldean	—	—
UsA—Urban land-Patton complex, nearly level				
	60	Urban land	—	—
	35	Patton	—	—
W—Water				
	100	Water	—	—
WbA—Warsaw loam, 0 to 3 percent slopes				
	90	Warsaw	2s	—
WeA—Wea silt loam, 0 to 2 percent slopes				
	90	Wea	2s	—
WeB—Wea silt loam, 2 to 6 percent slopes				
	90	Wea	2e	—
WnA—Westland silt loam, 0 to 2 percent slopes				
	85	Westland	2w	—
WsS1A1—Westboro-Schaffer silt loams, 0 to 2 percent slopes				
	55	Westboro	2w	—
	30	Schaffer	2w	—
WuB—Wynn-Urban land complex, gently sloping				
	55	Wynn	—	—
	30	Urban land	—	—
WuC—Wynn-Urban land complex, sloping				
	55	Wynn	—	—
	30	Urban land	—	—
WyB—Wynn silt loam, 2 to 6 percent slopes				
	85	Wynn	2e	—
WyB2—Wynn silt loam, 2 to 6 percent slopes, moderately eroded				
	85	Wynn	2e	—

Land Capability Classification--Butler County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
WyC2—Wynn silt loam, 6 to 12 percent slopes, moderately eroded				
	80	Wynn	2e	—
WyD2—Wynn silt loam, 12 to 18 percent slopes, eroded				
	95	Wynn	4e	—
WzC3—Wynn silty clay loam, 6 to 12 percent slopes, severely eroded				
	85	Wynn	2e	—
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				
	85	Xenia	2e	—
XeB2—Xenia silt loam, 2 to 6 percent slopes, moderately eroded				
	85	Xenia	2e	—
XfA—Xenia silt loam, bedrock substratum, 0 to 2 percent slopes				
	85	Xenia	1	—
XfB—Xenia silt loam, bedrock substratum, 2 to 6 percent slopes				
	85	Xenia	2e	—
XfB2—Xenia silt loam, bedrock substratum, 2 to 6 percent slopes, moderately eroded				
	80	Xenia	2e	—

## Data Source Information

Soil Survey Area: Butler County, Ohio  
 Survey Area Data: Version 13, Sep 18, 2014