

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—Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
AaB—Aaron silt loam, 2 to 6 percent slopes				
	85	Aaron	2e	—
AeC—Allegheny variant loam, 8 to 15 percent slopes				
	90	Allegheny variant	3e	—
As—Ashton silt loam, occasionally flooded				
	90	Ashton	2w	—
BaB—Barkcamp gravelly sandy loam, 0 to 8 percent slopes				
	85	Barkcamp	8s	—
BaD—Barkcamp gravelly sandy loam, 8 to 40 percent slopes				
	85	Barkcamp	8s	—
BaF—Barkcamp very stony sandy loam, 40 to 70 percent slopes				
	85	Barkcamp	8s	—
BbB—Barkcamp very flaggy sandy loam, 0 to 8 percent slopes, very stony				
	85	Barkcamp	8s	—
BbD—Barkcamp very flaggy sandy loam, 8 to 40 percent slopes, very stony				
	85	Barkcamp	8s	—
BcB—Barkcamp clay loam, 0 to 8 percent slopes				
	90	Barkcamp	6s	—
BcD—Barkcamp clay loam, 8 to 25 percent slopes				
	85	Barkcamp	6s	—
BeB—Bethesda silt loam, 0 to 8 percent slopes				
	85	Bethesda	3s	—
BeD—Bethesda silt loam, 8 to 25 percent slopes				
	85	Bethesda	4s	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
BfB—Bethesda channery loam, 0 to 8 percent slopes				
	90	Bethesda	6s	—
BfD—Bethesda channery loam, 8 to 25 percent slopes				
	90	Bethesda	6s	—
BfF—Bethesda channery loam, 25 to 70 percent slopes				
	90	Bethesda	7e	—
BgB—Bethesda channery silty clay loam, 0 to 8 percent slopes				
	85	Bethesda	6s	—
BgD—Bethesda channery silty clay loam, 8 to 25 percent slopes				
	85	Bethesda	6s	—
BgF—Bethesda channery silty clay loam, 25 to 70 percent slopes				
	85	Bethesda	7e	—
BhB—Bethesda shaly silty clay loam, 0 to 8 percent slopes				
	85	Bethesda	6s	—
BhD—Bethesda shaly silty clay loam, 8 to 25 percent slopes				
	85	Bethesda	6s	—
BhE—Bethesda shaly silty clay loam, 25 to 40 percent slopes				
	80	Bethesda	7e	—
BhF—Bethesda very cobbly silty clay loam, 40 to 70 percent slopes				
	85	Bethesda	7s	—
BsC—Brookside silty clay loam, 8 to 15 percent slopes				
	80	Brookside	3e	—
BsD—Brookside silty clay loam, 15 to 25 percent slopes				
	80	Brookside	4e	—
BsE—Brookside silty clay loam, 25 to 40 percent slopes				
	80	Brookside	6e	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
BuB—Brookside-Urban land complex, 3 to 15 percent slopes				
	45	Brookside	—	—
	40	Urban land	—	—
BuD—Brookside-Urban land complex, 15 to 40 percent slopes				
	45	Brookside	—	—
	40	Urban land	—	—
Cf—Chagrin loam, 0 to 3 percent slopes, occasionally flooded				
	85	Chagrin	2w	—
Cg—Chagrin silt loam, 0 to 3 percent slopes, occasionally flooded				
	85	Chagrin	2w	—
ChB—Chili gravelly loam, 3 to 8 percent slopes				
	85	Chili	2e	—
CmB—Chili-Urban land complex, 0 to 8 percent slopes				
	50	Chili	—	—
	40	Urban land	—	—
CuB—Culleoka silt loam, 3 to 8 percent slopes				
	80	Culleoka	2e	—
CuC—Culleoka silt loam, 8 to 15 percent slopes				
	80	Culleoka	3e	—
DeC—DeKalb channery loam, 6 to 15 percent slopes				
	85	DeKalb	3e	—
DkB—DeKalb loam, 3 to 8 percent slopes				
	80	DeKalb	2e	—
DkC—DeKalb loam, 8 to 15 percent slopes				
	80	DeKalb	3e	—
DkD—DeKalb loam, 15 to 25 percent slopes				
	85	DeKalb	4e	—
DkE—DeKalb loam, 25 to 40 percent slopes				
	80	DeKalb	6e	—
DmF—DeKalb moderately channery loam, 40 to 70 percent slopes				
	80	DeKalb	7e	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
DnC—Dekalb channery loam, 8 to 15 percent slopes				
	85	Dekalb	3e	—
DnD—Dekalb channery loam, 15 to 25 percent slopes				
	85	Dekalb	4e	—
DnE—Dekalb channery loam, 25 to 40 percent slopes				
	85	Dekalb	6e	—
DoF—Dekalb channery loam, 25 to 70 percent slopes, very stony				
	85	Dekalb	7s	—
Dp—Dumps				
	100	Dumps	—	—
Ds—Dumps, mine				
	100	Dumps	—	—
DuB—Duncannon-Urban land complex, 0 to 15 percent slopes				
	55	Duncannon	—	—
	40	Urban land	—	—
EbB—Elba silty clay loam, 3 to 8 percent slopes				
	85	Elba	2e	—
EbC—Elba silty clay loam, 8 to 15 percent slopes				
	80	Elba	3e	—
EbD—Elba silty clay loam, 15 to 25 percent slopes				
	80	Elba	4e	—
EbE—Elba silty clay loam, 25 to 40 percent slopes				
	80	Elba	6e	—
EIB—Elkinsville silt loam, 3 to 8 percent slopes				
	95	Elkinsville	2e	—
EIC—Elkinsville silt loam, 8 to 15 percent slopes				
	75	Elkinsville	3e	—
EID—Elkinsville silt loam, 15 to 25 percent slopes				
	80	Elkinsville	4e	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
FbB—Fairpoint gravelly clay loam, 0 to 8 percent slopes				
	80	Fairpoint	6s	—
FbD—Fairpoint gravelly clay loam, 8 to 25 percent slopes				
	85	Fairpoint	6s	—
FcB—Fairpoint silty clay loam, 0 to 8 percent slopes				
	80	Fairpoint	3s	—
FcD—Fairpoint silty clay loam, 8 to 25 percent slopes				
	80	Fairpoint	4s	—
FtA—Fitchville silt loam, 0 to 3 percent slopes				
	85	Fitchville	2w	—
GbB—Gilpin silt loam, 3 to 8 percent slopes				
	85	Gilpin	2e	—
GbC—Gilpin silt loam, 8 to 15 percent slopes				
	85	Gilpin	3e	—
GnB—Gilpin silt loam, 2 to 6 percent slopes				
	85	Gilpin	2e	—
GnC—Gilpin silt loam, 8 to 15 percent slopes				
	80	Gilpin	3e	—
GpC—Gilpin-Lowell complex, 6 to 15 percent slopes				
	55	Gilpin	3e	—
	30	Lowell	3e	—
GpD—Gilpin-Lowell silt loams, 15 to 25 percent slopes				
	55	Gilpin	4e	—
	35	Lowell	4e	—
He—Hartshorn silt loam, occasionally flooded				
	85	Hartshorn	2w	—
KaB—Kanawha loam, 2 to 6 percent slopes				
	85	Kanawha	2e	—
KeB—Keene silt loam, 3 to 8 percent slopes				
	90	Keene	2e	—
LeB—Lowell silt loam, 3 to 8 percent slopes				
	90	Lowell	2e	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
LeC—Lowell silt loam, moderately wet, 8 to 15 percent slopes				
	85	Lowell, moderately wet	3e	—
LeD—Lowell silt loam, moderately wet, 15 to 25 percent slopes				
	85	Lowell, moderately wet	4e	—
LeE—Lowell silt loam, 25 to 40 percent slopes				
	85	Lowell	6e	—
LeF—Lowell silt loam, 40 to 70 percent slopes				
	85	Lowell	7e	—
LgC—Lowell silt loam, 6 to 15 percent slopes				
	85	Lowell	3e	—
LoB—Lowell-Westmoreland silt loams, 3 to 8 percent slopes				
	45	Lowell, moderately wet	2e	—
	35	Westmoreland	2e	—
LoC—Lowell-Westmoreland silt loams, 8 to 15 percent slopes				
	50	Lowell, moderately wet	3e	—
	35	Westmoreland	3e	—
LoD—Lowell-Westmoreland silt loams, 15 to 25 percent slopes				
	50	Lowell, moderately wet	4e	—
	30	Westmoreland	4e	—
LoE—Lowell-Westmoreland silt loams, 25 to 35 percent slopes				
	45	Lowell	6e	—
	30	Westmoreland	6e	—
LoF—Lowell-Westmoreland silt loams, 35 to 70 percent slopes				
	45	Lowell	7e	—
	30	Westmoreland	7e	—
LpF—Lowell-Westmoreland silt loams, benched, 30 to 70 percent slopes				
	45	Lowell	7e	—
	35	Westmoreland	7e	—
Md—Melvin silt loam, ponded				
	90	Melvin	5w	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
MnB—Morristown clay loam, 0 to 8 percent slopes				
	80	Morristown	3s	—
MnD—Morristown clay loam, 8 to 25 percent slopes				
	80	Morristown	4s	—
MnE—Morristown clay loam, 25 to 40 percent slopes				
	80	Morristown	6e	—
MoB—Morristown stony clay loam, 0 to 8 percent slopes				
	90	Morristown	6s	—
MoD—Morristown stony clay loam, 8 to 25 percent slopes				
	90	Morristown	6s	—
MoE—Morristown stony clay loam, 25 to 40 percent slopes				
	85	Morristown	7e	—
MoF—Morristown very stony clay loam, 40 to 70 percent slopes				
	85	Morristown	7e	—
MpB—Morristown silty clay loam, 0 to 8 percent slopes				
	85	Morristown	3s	—
MpD—Morristown silty clay loam, 8 to 25 percent slopes				
	90	Morristown	4s	—
MrB—Morristown channery silty clay loam, 0 to 8 percent slopes, stony				
	85	Morristown	6s	—
MrD—Morristown channery silty clay loam, 8 to 25 percent slopes, stony				
	85	Morristown	6s	—
MrE—Morristown channery silty clay loam, 25 to 40 percent slopes, stony				
	85	Morristown	7e	—
MsF—Morristown channery silt loam, 25 to 70 percent slopes, bouldery				
	85	Morristown	7e	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Ne—Newark silt loam, frequently flooded				
	85	Newark	2w	—
Nm—Newark silt loam, ponded				
	90	Newark	5w	—
Nn—Newark Variant silt loam, frequently flooded				
	80	Newark variant	2w	—
No—Nolin silt loam, 0 to 3 percent slopes, occasionally flooded				
	85	Nolin, occasionally flooded	2w	—
Nu—Nolin variant-Urban land complex				
	40	Nolin variant	—	—
	40	Urban land	—	—
Omm1B1—Omulga silt loam, mixed substratum, 2 to 6 percent slopes				
	85	Omulga, mixed mineralogy substratum phase	2e	—
Omm1C1—Omulga silt loam, mixed substratum, 6 to 12 percent slopes				
	85	Omulga, mixed mineralogy substratum phase	3e	—
Omu1B1—Omulga silt loam, 2 to 6 percent slopes				
	85	Omulga	2e	—
Omu1C1—Omulga silt loam, 6 to 12 percent slopes				
	85	Omulga	3e	—
RcC—Richland loam, 8 to 15 percent slopes				
	85	Richland	3e	—
RcD—Richland loam, 15 to 25 percent slopes				
	85	Richland	4e	—
RcE—Richland moderately stony loam, 25 to 40 percent slopes				
	80	Richland	7s	—
RhB—Richland silt loam, 3 to 8 percent slopes				
	85	Richland	2e	—
RkC—Richland channery loam, 8 to 15 percent slopes				
	80	Richland	3e	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
RkD—Richland channery loam, 15 to 25 percent slopes				
	80	Richland	4e	—
RnC—Richland silt loam, 6 to 15 percent slopes				
	85	Richland	3e	—
Uc—Udorthents-Pits complex				
	70	Udorthents	—	—
	20	Pits	—	—
Ud—Udorthents-Urban land complex				
	60	Udorthents	—	—
	35	Urban land	—	—
UpB—Upshur silt loam, 2 to 6 percent slopes				
	85	Upshur	3e	—
W—Water				
	100	Water	—	—
WgB—Wellston silt loam, 2 to 8 percent slopes				
	85	Wellston	2e	—
WhB—Wellston silt loam, 3 to 8 percent slopes				
	85	Wellston	2e	—
WhC—Wellston silt loam, 8 to 15 percent slopes				
	85	Wellston	3e	—
WjB—Westmore silt loam, 2 to 8 percent slopes				
	85	Westmore	2e	—
WkB—Westmore silt loam, 3 to 8 percent slopes				
	80	Westmore	2e	—
WkC—Westmore silt loam, 8 to 15 percent slopes				
	80	Westmore	3e	—
WkD—Westmore silt loam, 15 to 25 percent slopes				
	85	Westmore	4e	—
WIC—Westmoreland silt loam, 6 to 15 percent slopes				
	85	Westmoreland	3e	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
WmB—Westmoreland silt loam, 3 to 8 percent slopes				
	85	Westmoreland	2e	—
WmC—Westmoreland silt loam, 8 to 15 percent slopes				
	80	Westmoreland	3e	—
WmD—Westmoreland silt loam, 15 to 25 percent slopes				
	80	Westmoreland	4e	—
WmE—Westmoreland silt loam, 25 to 35 percent slopes				
	80	Westmoreland	6e	—
WmF—Westmoreland silt loam, 35 to 60 percent slopes				
	80	Westmoreland	7e	—
WmW1D2—Westmoreland-Woodsfield silt loams, 12 to 18 percent slopes, eroded				
	45	Westmoreland	4e	—
	40	Woodsfield	4e	—
WnF—Westmoreland-Berks complex, 40 to 70 percent slopes				
	55	Westmoreland	7e	—
	30	Berks	7e	—
WoC—Westmoreland-Upshur complex, 8 to 15 percent slopes				
	45	Westmoreland	3e	—
	35	Upshur	4e	—
WoD—Westmoreland-Upshur complex, 15 to 25 percent slopes				
	50	Westmoreland	4e	—
	30	Upshur	6e	—
WrE—Westmoreland-Dekalb complex, 25 to 40 percent slopes				
	55	Westmoreland	6e	—
	30	Dekalb	6e	—
WrF—Westmoreland-Dekalb complex, 40 to 70 percent slopes				
	55	Westmoreland	7e	—
	30	Dekalb	7e	—

Land Capability Classification--Belmont County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
ZnB—Zanesville silt loam, 3 to 8 percent slopes				
	80	Zanesville	2e	—
ZnC—Zanesville silt loam, 8 to 15 percent slopes				
	80	Zanesville	3e	—

Data Source Information

Soil Survey Area: Belmont County, Ohio
 Survey Area Data: Version 12, Sep 18, 2014