

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—Madison County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Bs—Brookston silty clay loam, fine texture, 0 to 2 percent slopes				
	90	Brookston	2w	—
Ca—Carlisle muck				
	100	Carlisle	5w	—
CcB—Casco loam, 2 to 6 percent slopes				
	100	Casco	3e	—
CeB—Celina silt loam, 2 to 6 percent slopes				
	85	Celina	2e	—
CoA—Corwin silt loam, 0 to 2 percent slopes				
	95	Corwin	1	—
CoB—Corwin silt loam, 2 to 6 percent slopes				
	90	Corwin	2e	—
CrA—Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes				
	90	Crosby	2w	—
CrB—Crosby silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes				
	90	Crosby	2e	—
CsA—Crosby-Lewisburg silt loams, 0 to 2 percent slopes				
	55	Crosby	2w	—
	35	Lewisburg	2w	—
CsB—Crosby-Lewisburg silt loams, 2 to 6 percent slopes				
	55	Crosby	2e	—
	35	Lewisburg	2e	—
EIA—Eldean silt loam, 0 to 2 percent slopes				
	90	Eldean	2s	—
EIB—Eldean silt loam, 2 to 6 percent slopes				
	90	Eldean	2e	—

Land Capability Classification--Madison County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
EIC2—Eldean silt loam, 6 to 12 percent slopes, eroded				
	90	Eldean	3e	—
HeF—Hennepin-Miamian silt loams, 25 to 50 percent slopes				
	55	Hennepin	7e	—
	30	Miamian	7e	—
KeB—Kendallville silt loam, 2 to 6 percent slopes				
	90	Kendallville	2e	—
KeC2—Kendallville silt loam, 6 to 12 percent slopes, eroded				
	85	Kendallville	3e	—
Ko—Kokomo silty clay loam, 0 to 2 percent slopes				
	90	Kokomo	2w	—
LeB—Lewisburg-Celina silt loams, 2 to 6 percent slopes				
	50	Lewisburg	2e	—
	30	Celina	2e	—
Lp—Lippincott silty clay loam				
	100	Lippincott	2w	—
Mk—Medway silt loam, occasionally flooded				
	90	Medway	2w	—
MIB—Miamian silt loam, 2 to 6 percent slopes				
	85	Miamian	2e	—
MIB2—Miamian silt loam, 2 to 6 percent slopes, eroded				
	85	Miamian, eroded	2e	—
MIC2—Miamian silt loam, 6 to 12 percent slopes, eroded				
	85	Miamian	3e	—
MID2—Miamian silt loam, 12 to 18 percent slopes, eroded				
	90	Miamian	4e	—
MIE2—Miamian silt loam, 18 to 25 percent slopes, eroded				
	90	Miamian	6e	—

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			Nonirrigated	Irrigated
MIF—Miamiian silt loam, 25 to 50 percent slopes				
	95	Miamian	7e	—
MnB—Miamiian-Eldean silt loams, 2 to 6 percent slopes				
	50	Miamian	2e	—
	35	Eldean	2e	—
MnC2—Miamiian-Eldean silt loams, 6 to 12 percent slopes, eroded				
	60	Miamian	3e	—
	25	Eldean	3e	—
MpB—Miamiian-Lewisburg silt loams, 2 to 6 percent slopes				
	55	Miamian	2e	—
	35	Lewisburg	2e	—
MrB—Miamiian-Kendallville silt loams, 2 to 6 percent slopes				
	55	Miamian	2e	—
	35	Kendallville	2e	—
MrC2—Miamiian-Kendallville silt loams, 6 to 12 percent slopes, eroded				
	63	Miamian	3e	—
	30	Kendallville	3e	—
Mu—Muskego muck				
	100	Muskego	3w	—
OdA—Odell-Lewisburg complex, 0 to 2 percent slopes				
	60	Odell	2w	—
	30	Lewisburg	2w	—
OdB—Odell-Lewisburg complex, 2 to 6 percent slopes				
	60	Odell	2e	—
	30	Lewisburg	2e	—
Pa—Patton silty clay loam				
	90	Patton	2w	—
Pc—Patton silty clay loam, overwash				
	100	Patton	2w	—
Pg—Pits, gravel				
	100	Pits	—	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Rs—Ross silt loam, occasionally flooded				
	90	Ross	2w	—
Sm—Sloan silt loam, sandy substratum, occasionally flooded				
	85	Sloan	3w	—
Sn—Sloan silt loam, frequently flooded				
	85	Sloan	3w	—
So—Sloan silty clay loam, frequently flooded				
	90	Sloan	3w	—
Sp—Sloan silt loam, occasionally flooded				
	85	Sloan	3w	—
TgA—Thackery silt loam, 1 to 4 percent slopes				
	95	Thackery	2e	—
ThA—Thackery variant silt loam, 0 to 2 percent slopes				
	90	Thackery variant	1	—
ThB—Thackery variant silt loam, 2 to 6 percent slopes				
	90	Thackery variant	2e	—
Ud—Udorthents				
	100	Udorthents	6s	—
W—Water				
	100	Water	—	—
Wa—Walkkill silt loam				
	100	Walkkill	3w	—
WbA—Warsaw silt loam, 0 to 2 percent slopes				
	85	Warsaw	2s	—
WeA—Wea silt loam, 0 to 3 percent slopes				
	90	Wea	1	—
WfA—Wea silt loam, 0 to 2 percent slopes				
	100	Wea	1	—
Wt—Westland silty clay loam				
	85	Westland	2w	—
Wv—Westland silty clay loam, silty substratum				
	85	Westland	2w	—

Data Source Information

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