

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—Carroll County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
AoC2—Aaron silty clay loam, 6 to 15 percent slopes, eroded				
	85	Aaron	3e	—
BkB—Berks channery silt loam, 3 to 8 percent slopes				
	85	Berks	2e	—
BkC—Berks channery silt loam, 8 to 15 percent slopes				
	85	Berks	3e	—
BkD—Berks shaly silt loam, 15 to 25 percent slopes				
	85	Berks	4e	—
BkE—Berks channery silt loam, 25 to 35 percent slopes				
	85	Berks	6e	—
BkF—Berks channery silt loam, 35 to 70 percent slopes				
	85	Berks	7e	—
BnD—Bethesda channery clay loam, 8 to 25 percent slopes				
	85	Bethesda	6s	—
BnF—Bethesda channery clay loam, 25 to 70 percent slopes				
	90	Bethesda	7e	—
BoF—Bethesda channery silty clay loam, 25 to 70 percent slopes				
	85	Bethesda	7e	—
BrA—Boyer loam, 0 to 4 percent slopes				
	95	Boyer	3s	—
BsB—Berks channery silt loam, 2 to 6 percent slopes				
	85	Berks	2e	—

Land Capability Classification--Carroll County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
BsC—Berks channery silt loam, 6 to 15 percent slopes				
	85	Berks	3e	—
BsD—Berks channery silt loam, 15 to 25 percent slopes				
	85	Berks	4e	—
BsE—Berks channery silt loam, 25 to 40 percent slopes				
	85	Berks	6e	—
CeA—Chili loam, 0 to 2 percent slopes				
	100	Chili	2s	—
CeB—Chili loam, 2 to 6 percent slopes				
	100	Chili	2e	—
CfB—Chili gravelly loam, 3 to 8 percent slopes				
	85	Chili	2e	—
CgC2—Chili gravelly loam, 6 to 12 percent slopes, moderately eroded				
	100	Chili	3e	—
ChA—Chili silt loam, 0 to 3 percent slopes				
	100	Chili	2s	—
ChB—Chili silt loam, 3 to 8 percent slopes				
	95	Chili	2e	—
ChC—Chili silt loam, 8 to 15 percent slopes				
	95	Chili	3e	—
CkA—Chili silt loam, 0 to 2 percent slopes				
	100	Chili	2s	—
CkB—Chili silt loam, 2 to 6 percent slopes				
	100	Chili	2e	—
CkC—Chili silt loam, 6 to 12 percent slopes				
	100	Chili	3e	—
CmB—Chili-Urban land complex, undulating				
	50	Chili	—	—
	50	Urban land	—	—
CnB—Coshocton silt loam, 3 to 8 percent slopes				
	85	Coshocton	2e	—

Land Capability Classification--Carroll County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
CoB—Coshocton-Keene silt loams, 3 to 8 percent slopes				
	50	Coshocton	2e	—
	35	Keene	2e	—
CpB—Coshocton silt loam, 2 to 6 percent slopes				
	90	Coshocton	2e	—
CpC—Coshocton silt loam, 6 to 15 percent slopes				
	85	Coshocton	3e	—
CpD—Coshocton silt loam, 15 to 25 percent slopes				
	85	Coshocton	4e	—
CsC—Coshocton-Guernsey silt loams, 8 to 15 percent slopes				
	55	Coshocton	3e	—
	30	Guernsey	3e	—
CsD—Coshocton-Guernsey silt loams, 15 to 25 percent slopes				
	60	Coshocton	4e	—
	30	Guernsey	4e	—
CtD—Coshocton-Guernsey very stony silt loams, 15 to 25 percent slopes				
	55	Coshocton	6s	—
	30	Guernsey	6s	—
CuB—Culleoka silt loam, 3 to 8 percent slopes				
	85	Culleoka	2e	—
DkB—DeKalb sandy loam, 2 to 6 percent slopes				
	100	DeKalb	2e	—
DkC—DeKalb sandy loam, 6 to 12 percent slopes				
	100	DeKalb	3e	—
EbB—Elba silty clay loam, 3 to 8 percent slopes				
	95	Elba	2e	—
EbC2—Elba silty clay loam, 8 to 15 percent slopes, eroded				
	100	Elba	3e	—

Land Capability Classification--Carroll County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
EcD2—Elba-Upshur silty clay loams, 15 to 25 percent slopes, eroded				
	50	Elba	4e	—
	35	Upshur	6e	—
Ek—Elkinsville silt loam, rarely flooded				
	85	Elkinsville	1	—
FaD—Fairpoint channery clay loam, 8 to 25 percent slopes				
	85	Fairpoint	6s	—
FaF—Fairpoint channery clay loam, 25 to 70 percent slopes				
	100	Fairpoint	7e	—
FbA—Fitchville silt loam, 0 to 2 percent slopes				
	85	Fitchville	2w	—
FbB—Fitchville silt loam, 2 to 6 percent slopes				
	95	Fitchville	2e	—
FbC—Fitchville silt loam, 6 to 12 percent slopes				
	100	Fitchville	3e	—
FcA—Fitchville silt loam, 0 to 3 percent slopes				
	85	Fitchville	2w	—
FcB—Fitchville silt loam, 3 to 8 percent slopes				
	85	Fitchville	2e	—
FpB—Fairpoint silty clay loam, 0 to 8 percent slopes				
	90	Fairpoint	3s	—
FrD—Fairpoint very channery silt loam, 8 to 25 percent slopes				
	85	Fairpoint	6s	—
FrF—Fairpoint very channery silt loam, 25 to 70 percent slopes				
	85	Fairpoint	7e	—
GbC—Germano fine sandy loam, 6 to 15 percent slopes				
	85	Germano	3e	—
GdB—Gilpin silt loam, 3 to 8 percent slopes				
	85	Gilpin	2e	—
GdC—Gilpin silt loam, 8 to 15 percent slopes				
	80	Gilpin	3e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
GeB—Glenford silt loam, 2 to 6 percent slopes				
	85	Glenford	2e	—
GeC—Glenford silt loam, 6 to 12 percent slopes				
	100	Glenford	3e	—
GfB—Glenford silt loam, 3 to 8 percent slopes				
	85	Glenford	2e	—
GfC—Glenford silt loam, 8 to 15 percent slopes				
	85	Glenford	3e	—
GhC—Glenford silt loam, 6 to 15 percent slopes				
	85	Glenford	3e	—
GkC—Gilpin-Coshocton complex, 6 to 15 percent slopes				
	55	Gilpin	3e	—
	30	Coshocton	3e	—
GkD—Gilpin-Coshocton complex, 15 to 25 percent slopes				
	55	Gilpin	4e	—
	30	Coshocton	4e	—
GnC—Guernsey silt loam, 6 to 15 percent slopes				
	90	Guernsey	3e	—
GuB—Guernsey silty clay loam, 3 to 8 percent slopes				
	85	Guernsey	2e	—
GuC2—Guernsey silty clay loam, 8 to 15 percent slopes, eroded				
	85	Guernsey	3e	—
HaC—Hazleton channery loam, 8 to 15 percent slopes				
	85	Hazleton	3e	—
HaD—Hazleton channery loam, 15 to 25 percent slopes				
	85	Hazleton	4e	—
HaE—Hazleton channery loam, 25 to 40 percent slopes				
	85	Hazleton	6e	—
HeB—Hazleton loam, 3 to 8 percent slopes				
	90	Hazleton	2e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
HeC—Hazleton loam, 8 to 15 percent slopes				
	90	Hazleton	3e	—
HeD—Hazleton loam, 15 to 25 percent slopes				
	95	Hazleton	4e	—
HeE—Hazleton loam, 25 to 40 percent slopes				
	95	Hazleton	6e	—
HkA—Holly silt loam, 0 to 2 percent slopes, frequently flooded				
	95	Holly	3w	—
Ho—Holly silt loam, ponded				
	90	Holly	5w	—
HzB—Hazleton channery loam, 2 to 6 percent slopes				
	85	Hazleton	2e	—
HzC—Hazleton channery loam, 6 to 15 percent slopes				
	85	Hazleton	3e	—
JwA—Jimtown silt loam, 0 to 3 percent slopes				
	90	Jimtown	2w	—
KeB—Keene silt loam, 3 to 8 percent slopes				
	90	Keene	2e	—
LbB—Library Variant silt loam, 3 to 8 percent slopes				
	85	Library variant	2e	—
Lo—Lorain silty clay loam, silty substratum				
	95	Lorain	5w	—
MrD—Morristown shaly silty clay loam, 8 to 25 percent slopes				
	85	Morristown	6s	—
OmB—Omulga silt loam, 2 to 6 percent slopes				
	90	Omulga	2e	—
OmC—Omulga silt loam, 6 to 12 percent slopes				
	90	Omulga	3e	—
Or—Orrville silt loam, occasionally flooded				
	85	Orrville	2w	—
OsB—Oshtemo sandy loam, 3 to 8 percent slopes				
	95	Oshtemo	3s	3e

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
OtB—Oshtemo sandy loam, loamy substratum, 3 to 8 percent slopes				
	90	Oshtemo	3s	—
OvA—Orrville silt loam, 0 to 2 percent slopes, occasionally flooded				
	85	Orrville	2w	—
Pe—Peoga silt loam, rarely flooded				
	85	Peoga	3w	—
Pg—Pits, gravel				
	100	Pits	—	—
ReD—Rigley loam, 15 to 25 percent slopes				
	85	Rigley	4e	—
ReE—Rigley loam, 25 to 40 percent slopes				
	85	Rigley	7e	—
RgB—Rigley sandy loam, 3 to 8 percent slopes				
	95	Rigley	2e	—
RgC—Rigley sandy loam, 8 to 15 percent slopes				
	100	Rigley	3e	—
RgD—Rigley sandy loam, 15 to 25 percent slopes				
	100	Rigley	4e	—
RgE—Rigley sandy loam, 25 to 40 percent slopes				
	100	Rigley	7e	—
Sb—Sebring silt loam				
	85	Sebring	3w	—
Sg—Sebring-Urban land complex				
	50	Sebring	—	—
	50	Urban land	—	—
Ta—Tioga loam, occasionally flooded				
	85	Tioga	1	—
Tg—Tioga silt loam, occasionally flooded				
	90	Tioga	2w	—
Uc—Udorthents-Pits complex, 0 to 70 percent slopes				
	60	Udorthents	—	—
	30	Pits	—	—

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			Nonirrigated	Irrigated
Ud—Udorthents				
	100	Udorthents	—	—
UpC2—Upshur silty clay loam, 8 to 15 percent slopes, eroded				
	90	Upshur	4e	—
W—Water				
	100	Water	—	—
WhB—Wellston silt loam, 3 to 8 percent slopes				
	85	Wellston	2e	—
WkC—Westmoreland silt loam, 8 to 15 percent slopes				
	80	Westmoreland	3e	—
WkD—Westmoreland silt loam, 15 to 25 percent slopes				
	80	Westmoreland	4e	—
WkE—Westmoreland silt loam, 25 to 35 percent slopes				
	80	Westmoreland	6e	—
WIA—Wheeling loam, 0 to 2 percent slopes				
	100	Wheeling	1	—
WmC—Westmoreland-Coshocton silt loams, 8 to 15 percent slopes				
	60	Westmoreland	3e	—
	25	Coshocton	3e	—
WmD—Westmoreland-Coshocton silt loams, 15 to 25 percent slopes				
	60	Westmoreland	4e	—
	25	Coshocton	4e	—
WpA—Wheeling silt loam, 0 to 2 percent slopes				
	100	Wheeling	1	—
WpB—Wheeling silt loam, 2 to 6 percent slopes				
	100	Wheeling	2e	—
WrC—Westmoreland silt loam, 6 to 15 percent slopes				
	85	Westmoreland	3e	—

Data Source Information

Soil Survey Area: Carroll County, Ohio
Survey Area Data: Version 12, Sep 15, 2014