

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—Ross County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Aa—Adrian muck				
	90	Adrian	5w	—
AcC2—Alexandria silt loam, 6 to 12 percent slopes, eroded				
	90	Alexandria	3e	—
AcD2—Alexandria silt loam, 12 to 20 percent slopes, eroded				
	90	Alexandria	4e	—
AcE2—Alexandria silt loam, 20 to 35 percent slopes, eroded				
	90	Alexandria	6e	—
AeE2—Alexandria-Fox complex, 20 to 35 percent slopes, eroded				
	55	Alexandria	6e	—
	35	Fox	6e	—
BeD—Berks channery silt loam, 12 to 20 percent slopes				
	85	Berks	4e	—
BeE—Berks channery silt loam, 20 to 35 percent slopes				
	85	Berks	6e	—
BgC—Berks-Tarhollow complex, 6 to 15 percent slopes				
	50	Berks	3e	—
	40	Tarhollow	3e	—
CaB—Cana silt loam, 2 to 6 percent slopes				
	85	Cana	2e	—
CaC2—Cana silt loam, 6 to 12 percent slopes, eroded				
	90	Cana	3e	—
CaD2—Cana silt loam, 12 to 20 percent slopes, eroded				
	90	Cana	4e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
CaE2—Cana silt loam, 20 to 35 percent slopes, eroded				
	90	Cana	6e	—
Cd—Carlisle muck				
	90	Carlisle	3w	—
CeD—Casco-Rodman complex, 12 to 18 percent slopes				
	65	Casco	6e	—
	25	Rodman	4s	—
CgA—Celina silt loam, 0 to 2 percent slopes				
	90	Celina	1	—
CgB—Celina silt loam, 2 to 6 percent slopes				
	85	Celina	2e	—
CgB2—Celina silt loam, 2 to 6 percent slopes, eroded				
	90	Celina	2e	—
ChA—Chavies silt loam, rarely flooded				
	90	Chavies	1	—
CmA—Cidermill silt loam, 0 to 2 percent slopes				
	90	Cidermill	1	—
CmB—Cidermill silt loam, 2 to 6 percent slopes				
	90	Cidermill	2e	—
Cp—Clifty silt loam, occasionally flooded				
	90	Clifty	2s	—
CrA—Coolville silt loam, 0 to 2 percent slopes				
	90	Coolville	2w	—
CrB—Coolville silt loam, 2 to 6 percent slopes				
	90	Coolville	2e	—
CrC2—Coolville silt loam, 6 to 12 percent slopes, eroded				
	90	Coolville	3e	—
CvA—Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes				
	90	Crosby	2w	—
CvB—Crosby silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes				
	90	Crosby	2e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
CwC2—Cruze silt loam, 6 to 12 percent slopes, eroded				
	90	Cruze	3e	—
CwD—Cruze silt loam, 12 to 20 percent slopes				
	90	Cruze	4e	—
CwE—Cruze silt loam, 20 to 35 percent slopes				
	90	Cruze	6e	—
DAM—Dam				
	100	Dam	—	—
EeA—Eldean loam, 0 to 2 percent slopes				
	90	Eldean	2s	—
EeB—Eldean loam, 2 to 6 percent slopes				
	90	Eldean	2e	—
EeC2—Eldean loam, 6 to 12 percent slopes, eroded				
	85	Eldean	3e	—
EgA—Eldean gravelly loam, 0 to 2 percent slopes				
	90	Eldean	2s	—
EgB—Eldean gravelly loam, 2 to 6 percent slopes				
	90	Eldean	2e	—
EgC2—Eldean gravelly loam, 6 to 12 percent slopes, eroded				
	85	Eldean	3e	—
ErD—Ernest silt loam, 15 to 25 percent slopes				
	85	Ernest	4e	—
EuA—Euclid silt loam, rarely flooded				
	85	Euclid	2w	—
FhA—Fitchville silt loam, 0 to 2 percent slopes				
	85	Fitchville	2w	—
FhB—Fitchville silt loam, 2 to 6 percent slopes				
	85	Fitchville	2e	—
FnB—Fox loam, 2 to 6 percent slopes				
	90	Fox	2e	—
FnC2—Fox loam, 6 to 12 percent slopes, eroded				
	85	Fox	3e	—

Land Capability Classification--Ross County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Ge—Gessie silt loam, occasionally flooded	80	Gessie	2w	—
Gf—Gessie silt loam, frequently flooded	85	Gessie	2w	—
GgC2—Gilpin silt loam, 8 to 15 percent slopes	80	Gilpin	3e	—
GhC—Gilpin-Tilsit complex, 6 to 12 percent slopes	60	Gilpin	3e	—
	30	Tilsit	3e	—
GnA—Glenford silt loam, 0 to 2 percent slopes	90	Glenford	1	—
GnB—Glenford silt loam, 2 to 6 percent slopes	85	Glenford	2e	—
HaB—Haubstadt silt loam, 2 to 6 percent slopes	90	Haubstadt	2e	—
HaC2—Haubstadt silt loam, 6 to 12 percent slopes, eroded	90	Haubstadt	3e	—
Hd—Haymond silt loam, occasionally flooded	85	Haymond	2w	—
HeA—Henshaw silt loam, 0 to 4 percent slopes	90	Henshaw	2w	—
HkD2—Hickory silt loam, 12 to 20 percent slopes, eroded	90	Hickory	4e	—
HkE2—Hickory silt loam, 20 to 35 percent slopes, eroded	90	Hickory	6e	—
Ht—Huntington silt loam, occasionally flooded	85	Huntington	2w	—
KaA—Kendallville silt loam, 0 to 2 percent slopes	85	Kendallville	1	—
KaB—Kendallville silt loam, 2 to 6 percent slopes	85	Kendallville	2e	—

Land Capability Classification--Ross County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
KeC2—Kendallville-Eldean complex, 6 to 12 percent slopes, eroded				
	60	Kendallville	3e	—
	30	Eldean	3e	—
KeD2—Kendallville-Eldean complex, 12 to 20 percent slopes, eroded				
	50	Kendallville	4e	—
	30	Eldean	4e	—
KeE2—Kendallville-Eldean complex, 20 to 35 percent slopes, eroded				
	50	Kendallville	6e	—
	30	Eldean	6e	—
Kn—Kinn silt loam, occasionally flooded				
	85	Kinn	2w	—
Ko—Kokomo silt loam, overwash				
	90	Kokomo	2w	—
Kp—Kokomo silty clay loam, 0 to 2 percent slopes				
	90	Kokomo	2w	—
LfC2—Latham silt loam, 8 to 15 percent slopes				
	90	Latham	3e	—
LfD2—Latham silt loam, 12 to 20 percent slopes, eroded				
	90	Latham	6e	—
LfE—Latham silt loam, 25 to 35 percent slopes				
	90	Latham	6e	—
LgD—Latham-Wharton complex, 15 to 25 percent slopes				
	50	Latham	6e	—
	40	Wharton	4e	—
LrB—Libre silt loam, 2 to 6 percent slopes				
	90	Libre	2e	—
LrC2—Libre silt loam, 6 to 12 percent slopes, eroded				
	90	Libre	3e	—
MaB—Markland silt loam, 2 to 6 percent slopes				
	90	Markland	3e	—

Land Capability Classification--Ross County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
MbC2—Markland silty clay loam, 6 to 12 percent slopes, eroded				
	85	Markland	4e	—
MbD2—Markland silty clay loam, 12 to 20 percent slopes, eroded				
	85	Markland	6e	—
MbE2—Markland silty clay loam, 20 to 35 percent slopes, eroded				
	90	Markland	7e	—
McA—Martinsville loam, rarely flooded				
	90	Martinsville	1	—
MdA—McGary silt loam, 0 to 2 percent slopes				
	90	Mcgary	3w	—
MdB—McGary silt loam, 2 to 6 percent slopes				
	90	Mcgary	3e	—
MeC2—Mentor silt loam, 6 to 12 percent slopes, eroded				
	90	Mentor	3e	—
MeD2—Mentor silt loam, 12 to 20 percent slopes, eroded				
	90	Mentor	4e	—
MfA—Mentor silt loam, rarely flooded				
	90	Mentor	1	—
MgA—Mentor silt loam, gravelly substratum, 0 to 2 percent slopes				
	90	Mentor	1	—
MgB—Mentor silt loam, gravelly substratum, 2 to 6 percent slopes				
	90	Mentor	2e	—
MhB—Miamian silt loam, 2 to 6 percent slopes				
	85	Miamian	2e	—
MhB2—Miamian silt loam, 2 to 6 percent slopes, eroded				
	85	Miamian, eroded	2e	—
MhC2—Miamian silt loam, 6 to 12 percent slopes, eroded				
	85	Miamian	3e	—

Land Capability Classification--Ross County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
MhD2—Miamiian silt loam, 12 to 20 percent slopes, eroded				
	90	Miamian	4e	—
MhE—Miamiian silt loam, 20 to 35 percent slopes				
	90	Miamian	6e	—
MmC2—Miamiian silt loam, bedrock substratum, 6 to 12 percent slopes, eroded				
	90	Miamian	3e	—
MmD2—Miamiian silt loam, bedrock substratum, 12 to 20 percent slopes, eroded				
	90	Miamian	4e	—
MnB—Miamiian-Lewisburg complex, 2 to 6 percent slopes				
	60	Miamian	2e	—
	30	Lewisburg	2e	—
MoB—Milton silt loam, 2 to 6 percent slopes				
	90	Milton	2e	—
MoC2—Milton silt loam, 6 to 12 percent slopes, eroded				
	85	Milton	3e	—
MoE2—Milton silt loam, 20 to 35 percent slopes, eroded				
	85	Milton	6e	—
NeC2—Negley loam, 6 to 12 percent slopes, eroded				
	90	Negley	3e	—
NeD2—Negley loam, 12 to 20 percent slopes, eroded				
	90	Negley	4e	—
NeE2—Negley loam, 20 to 35 percent slopes, eroded				
	90	Negley	6e	—
NnA—Nineveh silt loam, 0 to 2 percent slopes				
	90	Nineveh	2s	—
NnB—Nineveh silt loam, 2 to 6 percent slopes				
	90	Nineveh	2e	—
ObA—Ockley loam, 0 to 2 percent slopes				
	80	Ockley	2s	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
ObB—Ockley loam, 2 to 6 percent slopes				
	90	Ockley	2e	—
OmB—Omulga silt loam, 2 to 6 percent slopes				
	85	Omulga	2e	—
OmC2—Omulga silt loam, 6 to 12 percent slopes, eroded				
	90	Omulga	3e	—
Or—Orrville silt loam, frequently flooded				
	90	Orrville	2w	—
OwB—Otwell silt loam, 2 to 6 percent slopes				
	90	Otwell	2e	—
Pc—Patton silty clay loam, sandy substratum				
	90	Patton	2w	—
Pg—Peoga silt loam				
	85	Peoga	3w	—
PkA—Pike silt loam, 0 to 2 percent slopes				
	90	Pike	1	—
PkB—Pike silt loam, 2 to 6 percent slopes				
	90	Pike	2e	—
Pn—Pits, gravel				
	100	Pits	—	—
Po—Pits, quarry				
	100	Pits, quarry	—	—
Pp—Pope silt loam, frequently flooded				
	85	Pope	2w	—
PtB—Princeton sandy loam, 2 to 6 percent slopes				
	90	Princeton	2e	—
PtC—Princeton sandy loam, 6 to 12 percent slopes				
	90	Princeton	3e	—
PtD—Princeton sandy loam, 12 to 20 percent slopes				
	90	Princeton	4e	—
RbA—Rainsboro silt loam, 0 to 2 percent slopes				
	90	Rainsboro	2w	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
RbB—Rainsboro silt loam, 2 to 6 percent slopes				
	90	Rainsboro	2e	—
RbC2—Rainsboro silt loam, 6 to 12 percent slopes, eroded				
	90	Rainsboro	3e	—
RcF—Rigley-rock outcrop association, very steep				
	85	Rigley	7e	—
RdD2—Rodman gravelly loam, 12 to 20 percent slopes, eroded				
	90	Rodman	4s	—
RdE2—Rodman gravelly loam, 20 to 35 percent slopes, eroded				
	90	Rodman	7s	—
Rn—Ross silt loam, occasionally flooded				
	85	Ross	2w	—
Ro—Rossburg silt loam, rarely flooded				
	90	Rossburg	1	—
RpA—Rossmoyne silt loam, 0 to 2 percent slopes				
	90	Rossmoyne	2w	—
RpB—Rossmoyne silt loam, 2 to 6 percent slopes				
	90	Rossmoyne	2e	—
RpC2—Rossmoyne silt loam, 6 to 12 percent slopes, eroded				
	90	Rossmoyne	3e	—
RsB—Rossmoyne-Cana complex, 2 to 6 percent slopes				
	50	Rossmoyne	2e	—
	40	Cana	2e	—
RsC2—Rossmoyne-Cana complex, 6 to 12 percent slopes, eroded				
	50	Rossmoyne	3e	—
	40	Cana	3e	—
SfD—Shelocta silt loam, 12 to 20 percent slopes				
	90	Shelocta	4e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
SgF—Shelocta-Brownsville association, very steep				
	50	Shelocta	7e	—
	35	Brownsville	7e	—
ShE—Shelocta-Cruze-Weikert association, steep				
	40	Shelocta	6e	—
	30	Cruze	6e	—
	20	Weikert	7e	—
SkE—Shelocta-Rigley association, steep				
	50	Shelocta	7e	—
	30	Rigley	7e	—
Sp—Skidmore cobbly silt loam, occasionally flooded				
	90	Skidmore	2w	—
St—Sloan silty clay loam, occasionally flooded				
	80	Sloan	3w	—
SuB—Spargus channery silt loam, 2 to 6 percent slopes				
	85	Spargus	2e	—
Sv—Stonelick loam, occasionally flooded				
	85	Stonelick	2w	—
Sw—Stonelick fine sandy loam, frequently flooded				
	90	Stonelick	3w	—
TbA—Taggart silt loam, 0 to 2 percent slopes				
	85	Taggart	2w	—
ThC3—Thrifton clay loam, 6 to 12 percent slopes, severely eroded				
	85	Thrifton	4e	—
ThD3—Thrifton clay loam, 12 to 20 percent slopes, severely eroded				
	85	Thrifton	6e	—
ThE3—Thrifton clay loam, 20 to 35 percent slopes, severely eroded				
	90	Thrifton	7e	—
TnA—Tilsit silt loam, 0 to 2 percent slopes				
	90	Tilsit	2w	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
To—Tioga fine sandy loam, frequently flooded				
	90	Tioga	2w	—
TyA—Tyler silt loam, 0 to 2 percent slopes				
	90	Tyler	3w	—
Ud—Udorthents, loamy				
	100	Udorthents	—	—
W—Water				
	100	Water	—	—
WcA—Warsaw loam, 0 to 2 percent slopes				
	90	Warsaw	2s	—
Wk—Westland clay loam				
	85	Westland	2w	—
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	—
WtB—Wyatt silt loam, 2 to 6 percent slopes				
	85	Wyatt	3e	—
Wyc2—Wyatt silty clay loam, 6 to 12 percent slopes, eroded				
	85	Wyatt	4e	—
Wyd2—Wyatt silty clay loam, 12 to 18 percent slopes, eroded				
	90	Wyatt	6e	—

Data Source Information

Soil Survey Area: Ross County, Ohio
 Survey Area Data: Version 15, Sep 19, 2014