

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—Knox County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
AdD2—Amanda silt loam, 12 to 18 percent slopes, eroded				
	85	Amanda	4e	—
AdF2—Amanda silt loam, 18 to 40 percent slopes, eroded				
	90	Amanda	6e	—
BeG—Berks-Rock outcrop complex, 30 to 60 percent slopes				
	70	Berks	7e	—
	10	Rock outcrop	—	—
BgB—Bogart gravelly loam, 2 to 6 percent slopes				
	100	Bogart	2e	—
BnA—Bennington silt loam, 0 to 2 percent slopes				
	90	Bennington	2w	—
BnB—Bennington silt loam, 2 to 6 percent slopes				
	90	Bennington	2e	—
BoA—Bogart silt loam, 0 to 2 percent slopes				
	95	Bogart	1	—
BoB—Bogart silt loam, 2 to 6 percent slopes				
	90	Bogart	2e	—
BrC—Brownsville channery silt loam, 6 to 12 percent slopes				
	90	Brownsville	3e	—
BrD—Brownsville channery silt loam, 12 to 18 percent slopes				
	85	Brownsville	4e	—
BsE—Brownsville-Westmoreland complex, 18 to 25 percent slopes				
	60	Brownsville	4e	—
	30	Westmoreland	4e	—

Land Capability Classification--Knox County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
BsF—Brownsville-Westmoreland complex, 25 to 40 percent slopes				
	60	Brownsville	6e	—
	30	Westmoreland	6e	—
BtD—Brownsville channery silt loam, 15 to 25 percent slopes				
	85	Brownsville	4e	—
BtE—Brownsville channery silt loam, 25 to 35 percent slopes				
	85	Brownsville	6e	—
BuG—Brownsville-Rock outcrop complex, 35 to 60 percent slopes				
	65	Brownsville	7e	—
	15	Rock outcrop	—	—
ByF—Brownsville-Rock outcrop complex, 35 to 70 percent slopes				
	70	Brownsville	7e	—
	20	Rock outcrop	—	—
CaB—Canfield silt loam, 2 to 6 percent slopes				
	90	Canfield	2e	—
CaC—Canfield silt loam, 6 to 12 percent slopes				
	90	Canfield	3e	—
CdB—Centerburg silt loam, 2 to 6 percent slopes				
	90	Centerburg	2e	—
CdB2—Centerburg silt loam, 2 to 6 percent slopes, eroded				
	90	Centerburg	2e	—
CdC—Centerburg silt loam, 6 to 12 percent slopes				
	85	Centerburg	3e	—
CdC2—Centerburg silt loam, 6 to 12 percent slopes, eroded				
	80	Centerburg	3e	—
ChB—Chili gravelly loam, 2 to 6 percent slopes				
	85	Chili	2e	—
ChC—Chili gravelly loam, 6 to 12 percent slopes				
	85	Chili	3e	—

Land Capability Classification--Knox County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
ChD—Chili gravelly loam, 12 to 18 percent slopes				
	85	Chili	4e	—
ChE—Chili gravelly loam, 18 to 25 percent slopes				
	80	Chili	6e	—
CIB—Chili loam, 2 to 6 percent slopes				
	85	Chili	2e	—
CIC2—Chili loam, 6 to 12 percent slopes, eroded				
	90	Chili	3e	—
CID—Chili loam, 15 to 25 percent slopes				
	90	Chili	6e	—
CID2—Chili loam, 12 to 18 percent slopes, eroded				
	90	Chili	4e	—
CmA—Chili silt loam, 0 to 2 percent slopes				
	90	Chili	2s	—
CmB—Chili silt loam, 2 to 6 percent slopes				
	90	Chili	2e	—
CnC—Chili-Homewood silt loams, 6 to 12 percent slopes				
	55	Chili	3e	—
	35	Homewood	3e	—
CnD—Chili-Homewood silt loams, 12 to 18 percent slopes				
	50	Chili	4e	—
	40	Homewood	4e	—
CpB—Cidermill silt loam, 2 to 6 percent slopes				
	85	Cidermill	2e	—
Cr—Condit silt loam, 0 to 1 percent slopes				
	90	Condit	3w	—
CsC—Coshocton loam, 6 to 15 percent slopes				
	100	Coshocton	3e	—
CtC2—Coshocton silt loam, 6 to 15 percent slopes, eroded				
	85	Coshocton	3e	—

Land Capability Classification--Knox County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
CtD—Coshocton silt loam, 15 to 25 percent slopes				
	85	Coshocton	4e	—
CtD2—Coshocton silt loam, 15 to 25 percent slopes, eroded				
	85	Coshocton	4e	—
CvB—Coshocton silt loam, 2 to 6 percent slopes				
	80	Coshocton	2e	—
CvC—Coshocton silt loam, 6 to 12 percent slopes				
	80	Coshocton	3e	—
CvD—Coshocton silt loam, 12 to 18 percent slopes				
	90	Coshocton	4e	—
CxD—Coshocton-Rigley complex, 15 to 25 percent slopes				
	45	Coshocton	4e	—
	35	Rigley	6e	—
CzA—Crane silt loam, 1 to 4 percent slopes				
	90	Crane	2w	—
DAM—Dam				
	100	Dam	—	—
Du—Dumps				
	100	Dumps	—	—
FcA—Fitchville silt loam, 0 to 2 percent slopes				
	90	Fitchville	2w	—
FcB—Fitchville silt loam, 2 to 6 percent slopes				
	90	Fitchville	2e	—
FoA—Fox gravelly loam, 0 to 2 percent slopes				
	100	Fox	2s	—
FoB—Fox gravelly loam, 2 to 6 percent slopes				
	95	Fox	2e	—
FoC—Fox gravelly loam, 6 to 12 percent slopes				
	95	Fox	3e	—
FoD—Fox gravelly loam, 12 to 25 percent slopes				
	95	Fox	4e	—

Land Capability Classification--Knox County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
GhB—Gilpin silt loam, 3 to 8 percent slopes				
	85	Gilpin	2e	—
GhC—Gilpin silt loam, 8 to 15 percent slopes				
	80	Gilpin	3e	—
GkC—Gilpin silt loam, 6 to 15 percent slopes				
	85	Gilpin	3e	—
GnA—Glenford silt loam, 0 to 2 percent slopes				
	90	Glenford	1	—
GnB—Glenford silt loam, 2 to 6 percent slopes				
	90	Glenford	2e	—
GnC—Glenford silt loam, 6 to 12 percent slopes				
	85	Glenford	3e	—
GoB—Germano sandy loam, 2 to 6 percent slopes				
	85	Germano	2e	—
GpC—Gilpin silt loam, 8 to 15 percent slopes				
	90	Gilpin	3e	—
GrB—Gresham silt loam, 2 to 6 percent slopes				
	85	Gresham	2e	—
HaB—Hanover silt loam, 2 to 6 percent slopes				
	95	Hanover	2e	—
HaC—Hanover silt loam, 6 to 12 percent slopes				
	95	Hanover	3e	—
HaC2—Hanover silt loam, 6 to 12 percent slopes, moderately eroded				
	100	Hanover	3e	—
HaD—Hanover silt loam, 12 to 18 percent slopes				
	95	Hanover	4e	—
HaE—Hanover silt loam, 18 to 25 percent slopes				
	85	Hanover	6e	—
Ho—Holly silt loam, frequently flooded				
	90	Holly	3w	—
HrC—Homewood silt loam, 6 to 15 percent slopes				
	85	Homewood	3e	—

Land Capability Classification--Knox County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
HwB—Homewood silt loam, 2 to 6 percent slopes				
	85	Homewood	2e	—
HwC—Homewood silt loam, 6 to 12 percent slopes				
	90	Homewood	3e	—
HwD2—Homewood silt loam, 12 to 18 percent slopes, eroded				
	90	Homewood	4e	—
HwE2—Homewood silt loam, 18 to 25 percent slopes, eroded				
	90	Homewood	6e	—
JmA—Jimtown silt loam, 0 to 2 percent slopes				
	90	Jimtown	2w	—
JmB—Jimtown silt loam, 2 to 6 percent slopes				
	90	Jimtown	2e	—
La—Landes fine sandy loam, occasionally flooded				
	95	Landes	2w	—
Ld—Landes loam, occasionally flooded				
	90	Landes	2w	—
LfB—Latham silt loam, 2 to 6 percent slopes				
	100	Latham	3e	—
LfC—Latham silt loam, 6 to 12 percent slopes				
	95	Latham	4e	—
Ln—Linwood muck				
	90	Linwood	2w	—
Lo—Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded				
	85	Lobdell	2w	—
LuC—Loudonville silt loam, 6 to 15 percent slopes				
	90	Loudonville	3e	—
LuD—Loudonville silt loam, 15 to 20 percent slopes				
	85	Loudonville	4e	—
LvB—Loudonville silt loam, 2 to 6 percent slopes				
	90	Loudonville	2e	—

Land Capability Classification--Knox County, Ohio				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
LvC—Loudonville silt loam, 6 to 12 percent slopes				
	90	Loudonville	3e	—
LvD—Loudonville silt loam, 12 to 18 percent slopes				
	90	Loudonville	4e	—
LvE—Loudonville silt loam, 18 to 25 percent slopes				
	90	Loudonville	6e	—
Ly—Luray silty clay loam				
	90	Luray	2w	—
Md—Medway silt loam, occasionally flooded				
	95	Medway	2w	—
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	—
Or—Orrville silt loam, occasionally flooded				
	85	Orrville	2w	—
Pb—Pewamo silt loam, overwash				
	100	Pewamo	2w	—
Pc—Pewamo silty clay loam				
	90	Pewamo	2w	—
Pg—Pits, gravel				
	90	Pits	—	—
Pu—Pits, quarry				
	100	Pits	—	—
RcC—Richland silt loam, 6 to 15 percent slopes				
	85	Richland	3e	—
ReC—Rigley sandy loam, 8 to 15 percent slopes				
	85	Rigley	3e	—
ReD—Rigley sandy loam, 15 to 25 percent slopes				
	85	Rigley	4e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
RgB—Rigley sandy loam, 2 to 6 percent slopes				
	90	Rigley	2e	—
RgC—Rigley sandy loam, 6 to 12 percent slopes				
	85	Rigley	3e	—
RgD—Rigley sandy loam, 12 to 18 percent slopes				
	85	Rigley	4e	—
RhE—Rigley-Coshocton complex, 18 to 25 percent slopes				
	40	Rigley	6e	—
	30	Coshocton	6e	—
RmB—Rittman silt loam, 2 to 6 percent slopes				
	95	Rittman	2e	—
RmC2—Rittman silt loam, 6 to 12 percent slopes, eroded				
	90	Rittman	3e	—
RyC—Rigley sandy loam, 6 to 15 percent slopes				
	85	Rigley	3e	—
RyD—Rigley sandy loam, 15 to 25 percent slopes				
	85	Rigley	4e	—
ScD—Schaffener loamy sand, 12 to 25 percent slopes				
	95	Schaffener	6s	—
SdF—Schaffener very bouldery loamy sand, 25 to 60 percent slopes				
	95	Schaffener	7s	—
Se—Sebring silt loam				
	85	Sebring	3w	—
Sh—Shoals silt loam, 0 to 2 percent slopes, occasionally flooded				
	85	Shoals	2w	—
Sk—Shoals loam, coarse subsoil variant				
	95	Shoals variant	2w	—
Sn—Sloan silt loam, occasionally flooded				
	90	Sloan	3w	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
Tg—Tioga fine sandy loam, occasionally flooded				
	90	Tioga	2w	—
To—Tioga loam, occasionally flooded				
	90	Tioga	1	—
TvB—Titusville silt loam, 2 to 6 percent slopes				
	90	Titusville	2e	—
TvC—Titusville silt loam, 6 to 12 percent slopes				
	85	Titusville	3e	—
TwC—Titusville silt loam, 6 to 15 percent slopes				
	85	Titusville	3e	—
Ud—Udorthents, loamy				
	100	Udorthents	—	—
W—Water				
	100	Water	—	—
WaB—Wadsworth silt loam, 1 to 4 percent slopes				
	85	Wadsworth	3w	—
WeD—Westmoreland silt loam, 15 to 25 percent slopes				
	80	Westmoreland	4e	—
WmD—Westmoreland silt loam, 15 to 25 percent slopes				
	85	Westmoreland	4e	—
WmD2—Westmoreland silt loam, 15 to 25 percent slopes, eroded				
	85	Westmoreland	4e	—
WrD—Watertown sandy loam, 15 to 25 percent slopes				
	90	Watertown	6e	—
WsB—Wooster silt loam, 2 to 6 percent slopes				
	90	Wooster	2e	—
WsB2—Wooster silt loam, 2 to 6 percent slopes, moderately eroded				
	100	Wooster	2e	—
WsC—Wooster silt loam, 6 to 12 percent slopes				
	90	Wooster	3e	—

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Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
WsC2—Wooster silt loam, 6 to 12 percent slopes, moderately eroded				
	100	Wooster	3e	—
WsD2—Wooster silt loam, 12 to 18 percent slopes, eroded				
	90	Wooster	4e	—
WsE2—Wooster silt loam, 18 to 40 percent slopes, eroded				
	90	Wooster	6e	—
WsF—Wooster silt loam, 25 to 40 percent slopes				
	85	Wooster	6e	—

Data Source Information

Soil Survey Area: Knox County, Ohio
 Survey Area Data: Version 12, Sep 19, 2014