

Soils Map and Report

Client(s): BLAKE J ROBERTSON
 Location: Farm 8496 Tract 8872
 Township 36N Range 30W Sec.33
 Vernon County, Missouri

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 NEVADA SERVICE CENTER
 VERNON COUNTY SOIL & WATER CONSERVATION DISTRICT



Prepared with assistance from USDA-Natural Resources Conservation Service



Case PLUs	Soils
	Draft
	Planned
	Soil Mapunit



Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report---Map Unit Description (Brief, Generated)

Vernon County, Missouri

Map Unit: 40034--Barco loam, 2 to 5 percent slopes

Component: Barco (85%)

The Barco component makes up 85 percent of the map unit. Slopes are 2 to 5 percent. This component is on interfluves on plains. The parent material consists of residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. This component is in the R112XY103KS Loamy Upland ecological site. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Barden (5%)

Generated brief soil descriptions are created for major soil components. The Barden soil is a minor component.

Component: Deepwater (5%)

Generated brief soil descriptions are created for major soil components. The Deepwater soil is a minor component.

Component: Collinsville (5%)

Generated brief soil descriptions are created for major soil components. The Collinsville soil is a minor component.

Map Unit: 40035--Barco loam, 2 to 5 percent slopes, eroded

Component: Barco (88%)



The Barco component makes up 88 percent of the map unit. Slopes are 2 to 5 percent. This component is on interfluves on plains. The parent material consists of residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R112XY103KS Loamy Upland ecological site. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Barco (4%)

Generated brief soil descriptions are created for major soil components. The Barco soil is a minor component.

Component: Barden (4%)

Generated brief soil descriptions are created for major soil components. The Barden soil is a minor component.

Component: Coweta (4%)

Generated brief soil descriptions are created for major soil components. The Coweta soil is a minor component.

Map Unit: 40038--Barden silt loam, 1 to 5 percent slopes

Component: Barden (82%)

The Barden component makes up 82 percent of the map unit. Slopes are 1 to 5 percent. This component is on interfluves, plains. The parent material consists of loess over residuum weathered from shale. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 3 percent. This component is in the R112XY103KS Loamy Upland ecological site. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Parsons (5%)

Generated brief soil descriptions are created for major soil components. The Parsons soil is a minor component.

Component: Barco (5%)

Generated brief soil descriptions are created for major soil components. The Barco soil is a minor component.

Component: Liberal (3%)

Generated brief soil descriptions are created for major soil components. The Liberal soil is a minor component.

Component: Creldon (3%)

Generated brief soil descriptions are created for major soil components. The Creldon soil is a minor component.

Component: Sacville (2%)

Generated brief soil descriptions are created for major soil components. The Sacville soil is a minor component.

Map Unit: 40051--Coweta loam, 5 to 14 percent slopes

Component: Coweta (90%)

The Coweta component makes up 90 percent of the map unit. Slopes are 5 to 14 percent. This component is on hillslopes, uplands. The parent material consists of loamy residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 11 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R112XY105OK Shallow Sandstone Upland ecological site. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Barco (5%)

Generated brief soil descriptions are created for major soil components. The Barco soil is a minor component.



Component: Eram (3%)

Generated brief soil descriptions are created for major soil components. The Eram soil is a minor component.

Component: Bates (2%)

Generated brief soil descriptions are created for major soil components. The Bates soil is a minor component.

Map Unit: 46112--Hepler-Radley complex, 1 to 3 percent slopes, occasionally flooded

Component: Hepler (50%)

The Hepler component makes up 50 percent of the map unit. Slopes are 1 to 3 percent. This component is on drainageways on plains. The parent material consists of silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 2 percent. This component is in the R112XY121MO Wet Upland Drainageway ecological site. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Radley (35%)

The Radley component makes up 35 percent of the map unit. Slopes are 1 to 3 percent. This component is on drainageways on plains. The parent material consists of silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R112XY120MO Loamy Upland Drainageway ecological site. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Barden (5%)

Generated brief soil descriptions are created for major soil components. The Barden soil is a minor component.

Component: Barco (4%)

Generated brief soil descriptions are created for major soil components. The Barco soil is a minor component.

Component: Collinsville (4%)

Generated brief soil descriptions are created for major soil components. The Collinsville soil is a minor component.

Component: Parsons (2%)

Generated brief soil descriptions are created for major soil components. The Parsons soil is a minor component.

Map Unit: 70098--Bolivar fine sandy loam, 2 to 5 percent slopes

Component: Bolivar (90%)

The Bolivar component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on hillslopes, plains. The parent material consists of residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the F116BY007MO Dry Sandstone Upland Woodland ecological site. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Hector (4%)

Generated brief soil descriptions are created for major soil components. The Hector soil is a minor component.

Component: Barco (3%)

Generated brief soil descriptions are created for major soil components. The Barco soil is a minor component.

Component: Barden (2%)



Generated brief soil descriptions are created for major soil components. The Barden soil is a minor component.

Component: Arnica (1%)

Generated brief soil descriptions are created for major soil components. The Arnica soil is a minor component.

Data Source Information

Soil Survey Area: Vernon County, Missouri

Survey Area Data: Version 26, Sep 08, 2022

Soils Inventory Report

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
8872	12	40034	Barco loam, 2 to 5 percent slopes	0.0	0%
8872	12	40035	Barco loam, 2 to 5 percent slopes, eroded	1.8	31%
8872	12	40038	Barden silt loam, 1 to 5 percent slopes	3.3	57%
8872	12	40051	Coweta loam, 5 to 14 percent slopes	0.0	0%
8872	12	46112	Hepler-Radley complex, 1 to 3 percent slopes, occasionally flooded	0.7	12%

Total **5.8** **100%**

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
8872	26	40035	Barco loam, 2 to 5 percent slopes, eroded	0.2	33%
8872	26	40038	Barden silt loam, 1 to 5 percent slopes	0.3	50%
8872	26	46112	Hepler-Radley complex, 1 to 3 percent slopes, occasionally flooded	0.1	17%

Total **0.6** **100%**

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
8872	28	40034	Barco loam, 2 to 5 percent slopes	0.4	20%
8872	28	40035	Barco loam, 2 to 5 percent slopes, eroded	0.3	15%
8872	28	40038	Barden silt loam, 1 to 5 percent slopes	0.8	40%
8872	28	40051	Coweta loam, 5 to 14 percent slopes	0.2	10%
8872	28	46112	Hepler-Radley complex, 1 to 3 percent slopes, occasionally flooded	0.3	15%

Total **2.0** **100%**

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
8872	38	40034	Barco loam, 2 to 5 percent slopes	0.2	100%

Total **0.2** **100%**

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
8872	39	40034	Barco loam, 2 to 5 percent slopes	31.0	47%
8872	39	40038	Barden silt loam, 1 to 5 percent slopes	22.3	34%
8872	39	40051	Coweta loam, 5 to 14 percent slopes	10.7	16%
8872	39	46112	Hepler-Radley complex, 1 to 3 percent slopes, occasionally flooded	0.6	1%
8872	39	70098	Bolivar fine sandy loam, 2 to 5 percent slopes	0.9	1%

Total **65.5** **100%**

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
8872	40	40038	Barden silt loam, 1 to 5 percent slopes	0.2	67%
8872	40	46112	Hepler-Radley complex, 1 to 3 percent slopes, occasionally flooded	0.1	33%
8872	40	70098	Bolivar fine sandy loam, 2 to 5 percent slopes	0.0	0%

Total **0.3** **100%**

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
8872	41	40038	Barden silt loam, 1 to 5 percent slopes	2.8	16%
8872	41	46112	Hepler-Radley complex, 1 to 3 percent slopes, occasionally flooded	0.8	5%
8872	41	70098	Bolivar fine sandy loam, 2 to 5 percent slopes	13.6	79%

Total **17.2** **100%**

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
8872	42	40038	Barden silt loam, 1 to 5 percent slopes	0.0	0%

Total **0.0** **100%**

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
8872	43	40034	Barco loam, 2 to 5 percent slopes	0.5	16%
8872	43	40038	Barden silt loam, 1 to 5 percent slopes	0.5	16%
8872	43	40051	Coweta loam, 5 to 14 percent slopes	0.9	28%
8872	43	70098	Bolivar fine sandy loam, 2 to 5 percent slopes	1.3	41%

Total **3.2** **100%**

Grand Total **94.8** **100%**