

Technical Soil Descriptions

Technical soil descriptions describe the characteristics or properties (physical and chemical) of the soil including the parent material in which it formed. A pedon, a small three-dimensional area of the soil, serves as the reference point for the technical or soil series description. The soil description compares the soil to similar and other nearby soils and also includes a range of important characteristics. The detailed description method follows standards outlined in the Soil Survey Manual and many of the technical terms used in the description are defined in Soil Taxonomy.

Counties with Published Soil Surveys

Technical soil descriptions are located in the county soil survey descriptive legend.

Counties without Published Soil Surveys

Technical soil descriptions can be found in adjacent county published soil survey descriptive legends or at our [Official Soil Series Description](#) web site.

This section includes:

- **(a) Classification of the soils**

Bates County, Missouri
 Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series.)

Soil name	Family or higher taxonomic class
Balltown-----	Loamy-skeletal, mixed, thermic Lithic Hapludolls
Bates-----	Fine-loamy, siliceous, thermic Typic Argiudolls
Brazilton-----	Fine, mixed, nonacid, thermic Mollic Udarents
*Catoosa-----	Fine-silty, mixed, thermic Typic Argiudolls
Clareson-----	Clayey-skeletal, mixed, thermic Typic Argiudolls
Coweta-----	Loamy, siliceous, thermic, shallow Typic Hapludolls
*Deepwater-----	Fine-silty, mixed, thermic Typic Argiudolls
Eram-----	Fine, mixed, thermic Aquic Argiudolls
Hartwell-----	Fine, mixed, thermic Typic Argialbolls
Hepler-----	Fine-silty, mixed, thermic Mollic Endoaqualfs
Kanima-----	Loamy-skeletal, mixed, nonacid, thermic Alfic Udarents
Kenoma-----	Fine, smectitic, thermic Vertic Argiudolls
Newtonia-----	Fine-silty, mixed, thermic Typic Paleudolls
Okemah-----	Fine, mixed, thermic Aquic Paleudolls
Olpe-----	Clayey-skeletal, smectitic, thermic Typic Paleudolls
Osage-----	Fine, smectitic, thermic Vertic Haplaquolls
Summit-----	Fine, smectitic, thermic Vertic Argiudolls
Verdigris-----	Fine-silty, mixed, thermic Cumulic Hapludolls