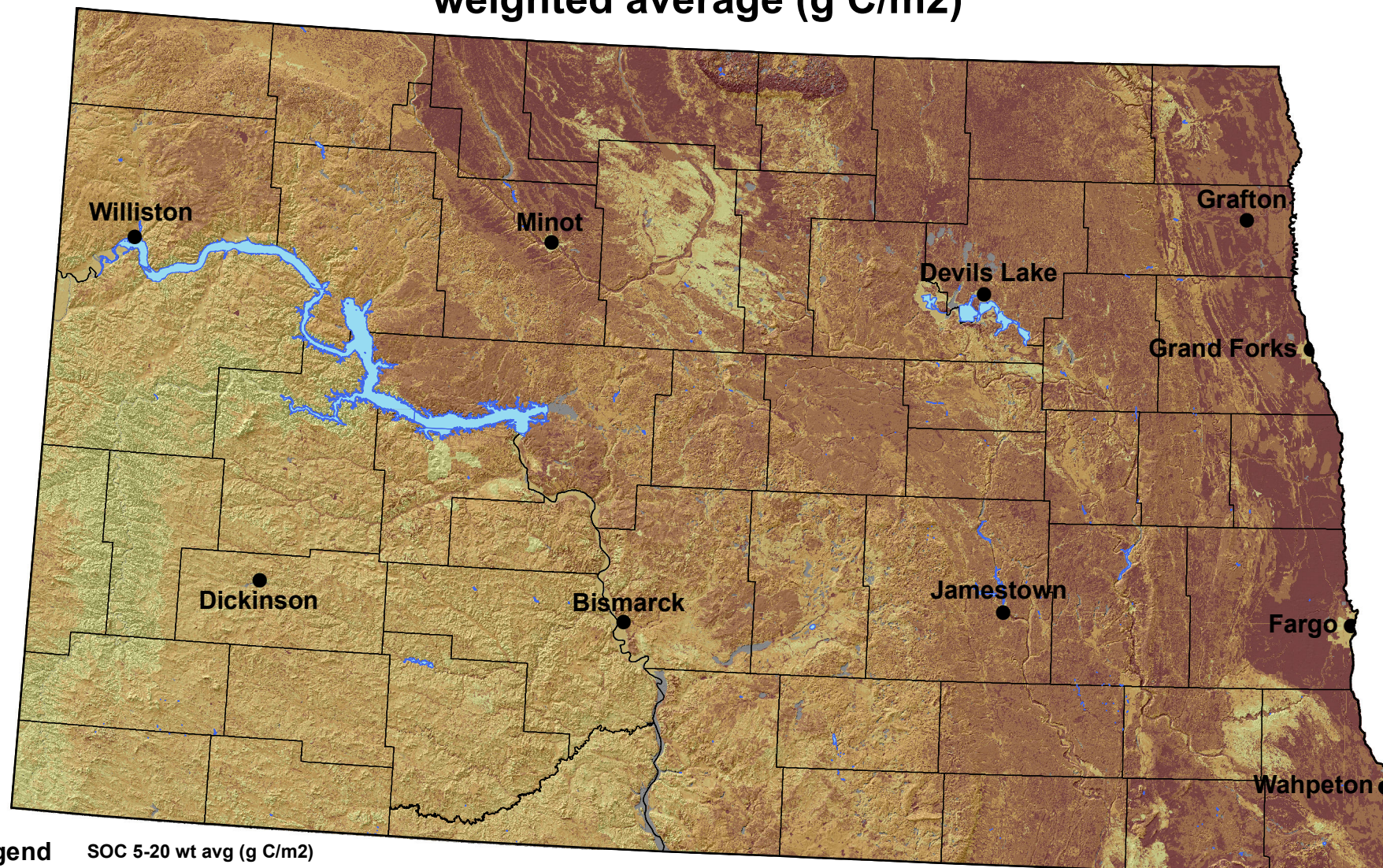




United States
Department of
Agriculture

Soil Organic Carbon 5-20 cm weighted average (g C/m²)



Legend

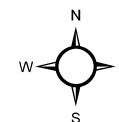
SOC 5-20 wt avg (g C/m²)

- City
 - County
 - State
 - Water
- | |
|----------------|
| 0 - 1,726 |
| 1,726 - 2,830 |
| 2,830 - 3,957 |
| 3,957 - 5,273 |
| 5,273 - 19,344 |



0 20 40 80 Miles

1:2,500,000



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Soil Survey Staff. The Gridded Soil Survey Geographic (SSURGO) Database for North Dakota. United States Department of Agriculture, Natural Resources Conservation Service.
Available online at <http://datagateway.nrcs.usda.gov/>. January 19, 2016 (FY2016 official release).

Soil Organic Carbon

Soil organic carbon stock estimate (SOC) in standard layer or standard zone (e.g. 0-5 cm depth). The concentration of organic carbon present in the soil expressed in grams C per square meter. NULL values are presented where data are incomplete or not available.

Soils contain carbon (C) in both organic and inorganic forms. In most soils (with the exception of calcareous soils) the majority of C is held as soil organic carbon (SOC). The term soil organic matter (SOM) is used to describe the organic constituents in the soil (tissues from dead plants and animals, products produced as these decompose and the soil microbial biomass). The term soil organic carbon' refers to the C occurring in the soil in SOM.

The constituents of SOM can be divided into non-humic substances, which are discrete identifiable compounds such as sugars, amino acids and lipids, and humic substances, which are complex largely unidentifiable organic compounds. As organic compounds, both humic and non-humic substances contain carbon, oxygen (O) and hydrogen (H) and can also contain nitrogen (N), phosphorus (P) and sulfur (S).

Humic or humus refers to the dark organic material in soils, produced by the decomposition of vegetable or animal matter. Typically, the humic fraction of soil organic matter is amorphous and without the "cellular structure characteristic of plants, micro-organisms or animals."

Citations

Milne, E. (2012). Soil organic carbon. Retrieved from
<http://www.eoearth.org/view/article/156087> March 11, 2016

Wikipedia, the free encyclopedia
<https://en.wikipedia.org/wiki/Humus> March 11, 2016

