

Glaciers, Potholes, and Plows: Soils and Landscape Evolution of the Upper Midwest

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Geology

Topography

Vegetation

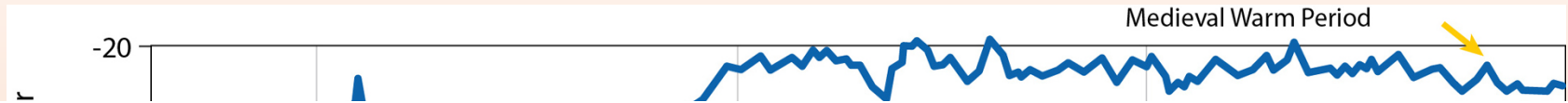


Climate

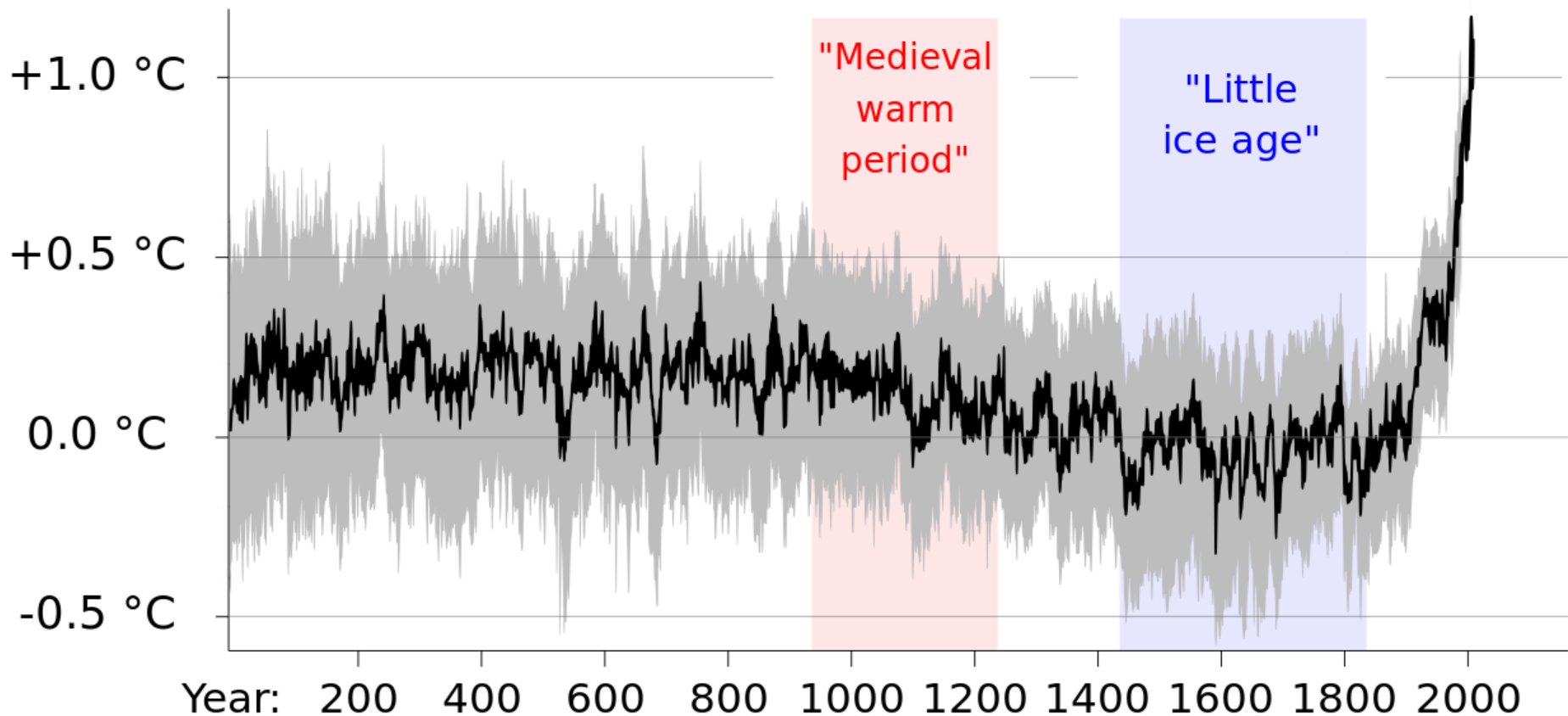
Time

SOIL

Soil Formation: Climate & Time



Global Average Temperature Change



Hawkins, 2019

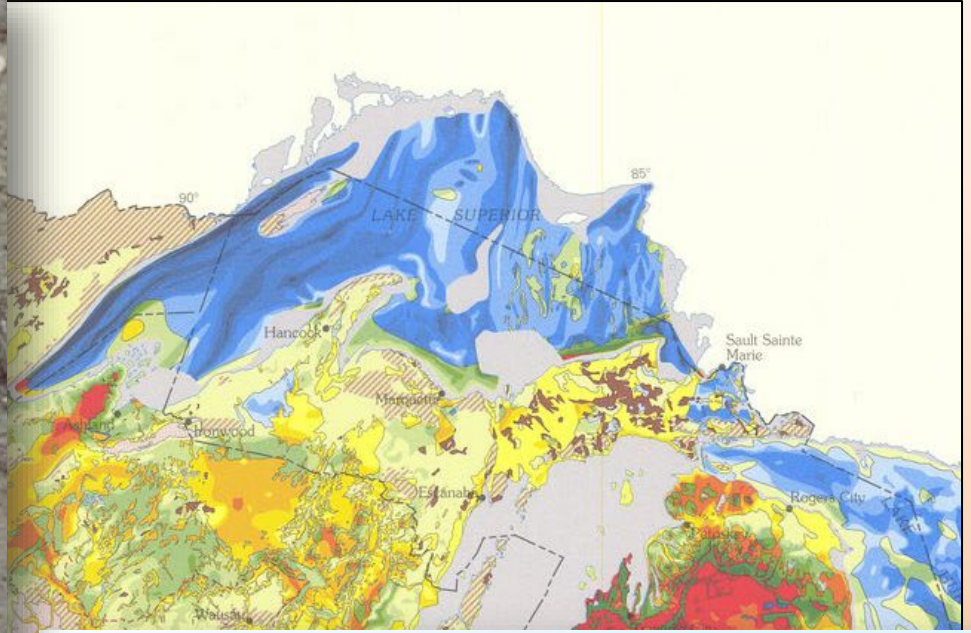
Hooyer and Iverson, 2017

From graphic by Ed Hawkins. Data: from PAGES2k (and HadCRUT 4.6 for 2001-). Reference period: 1850-1900.

Soil Formation: Geology

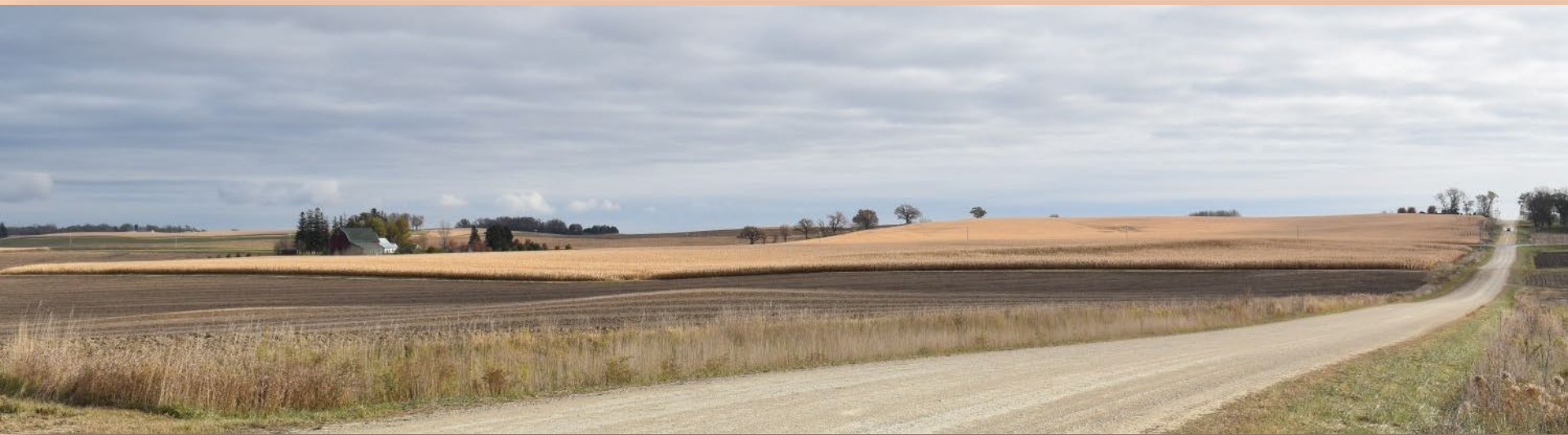


©Tim Kemmis

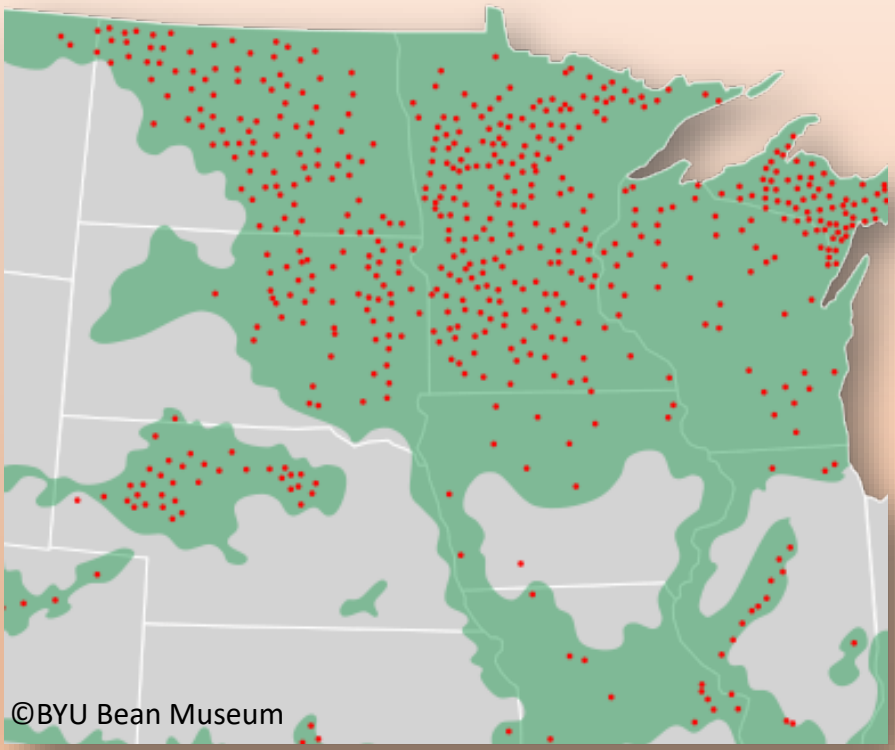


©USGS

Soil Formation: Topography



Soil Formation: Geology/Topography

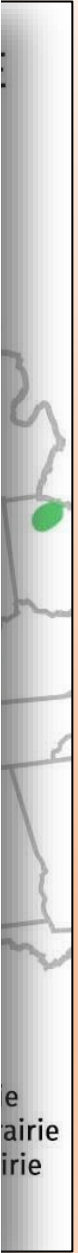
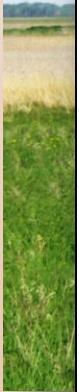
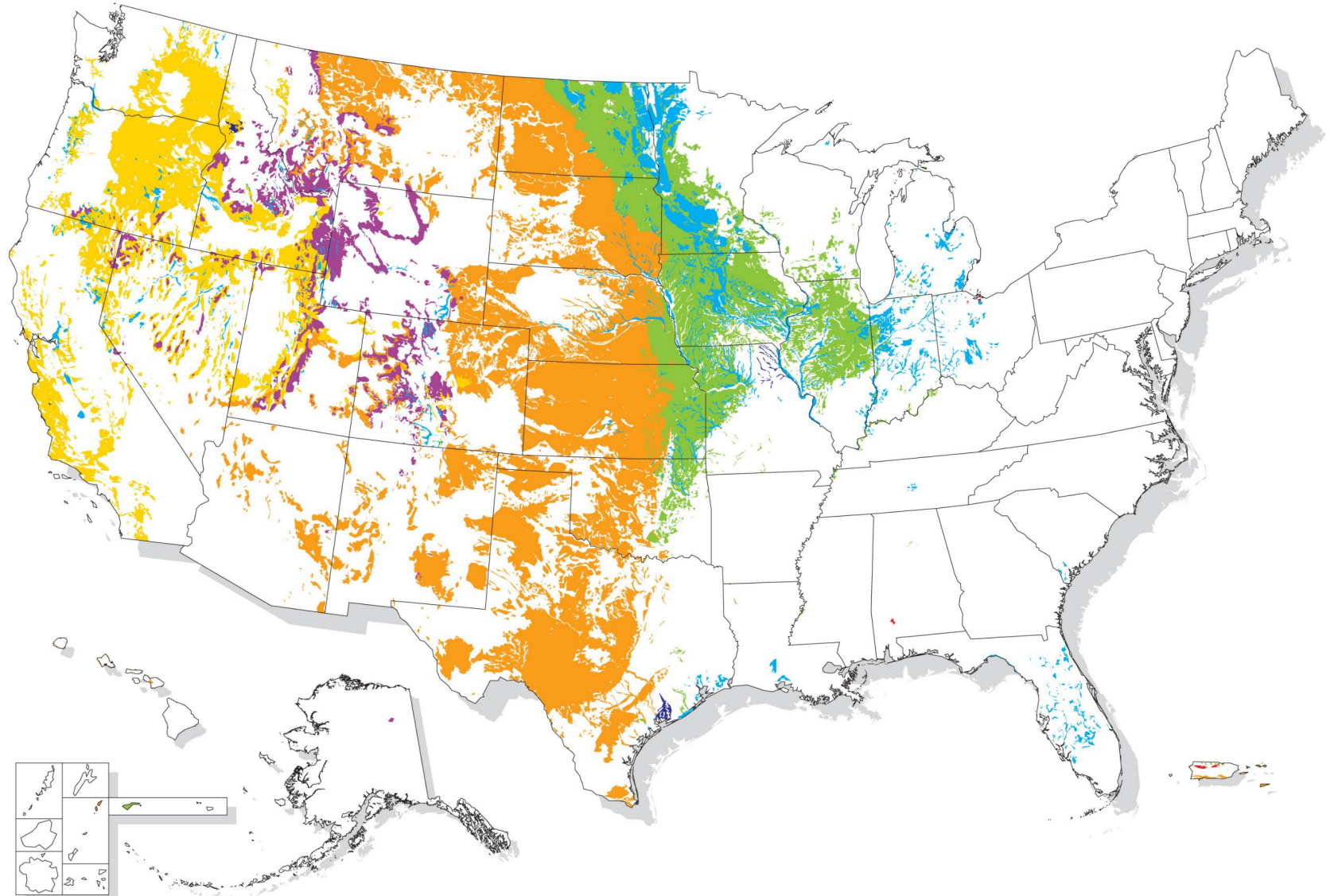


©BYU Bean Museum

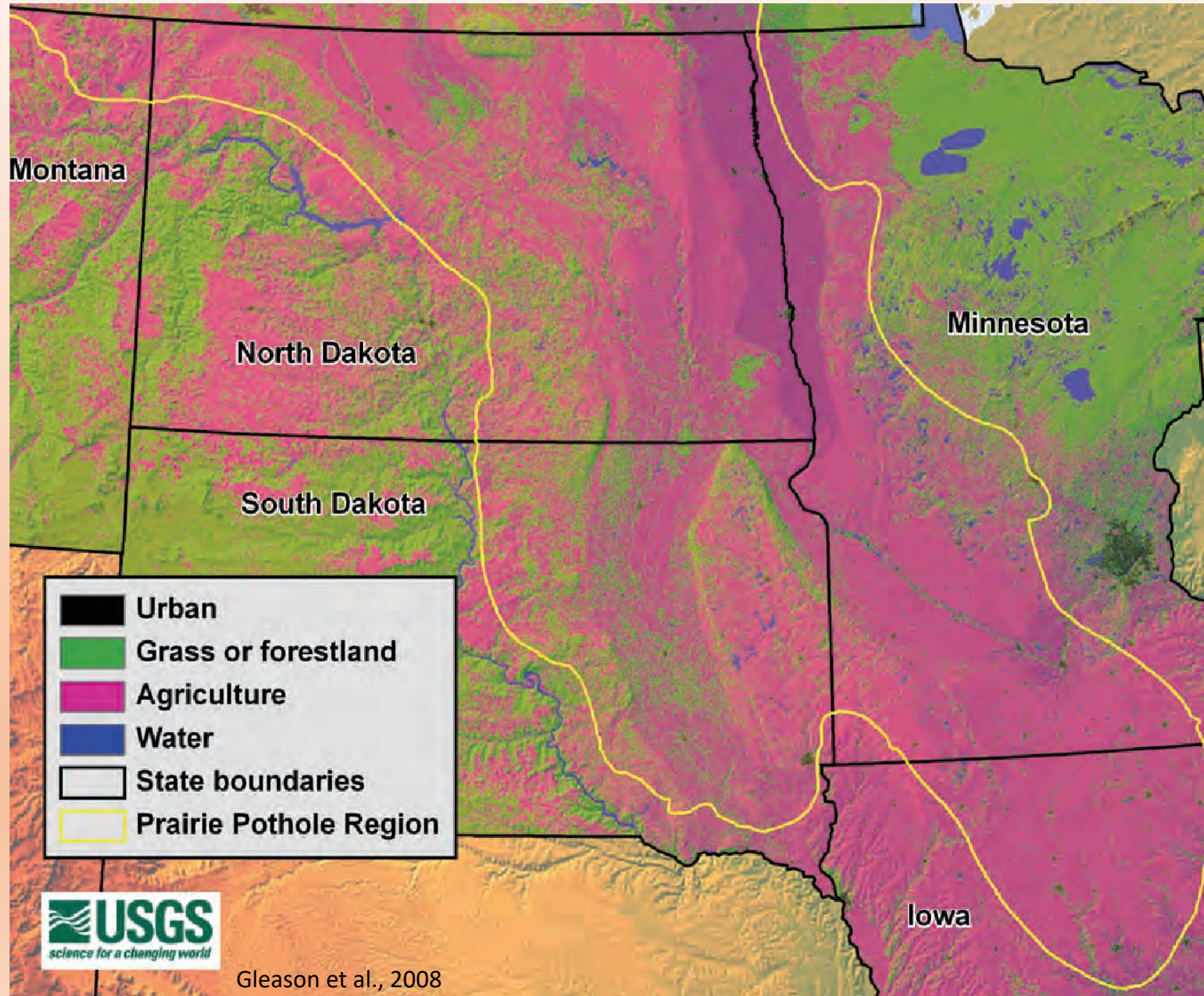


Soil Formation: Native Vegetation

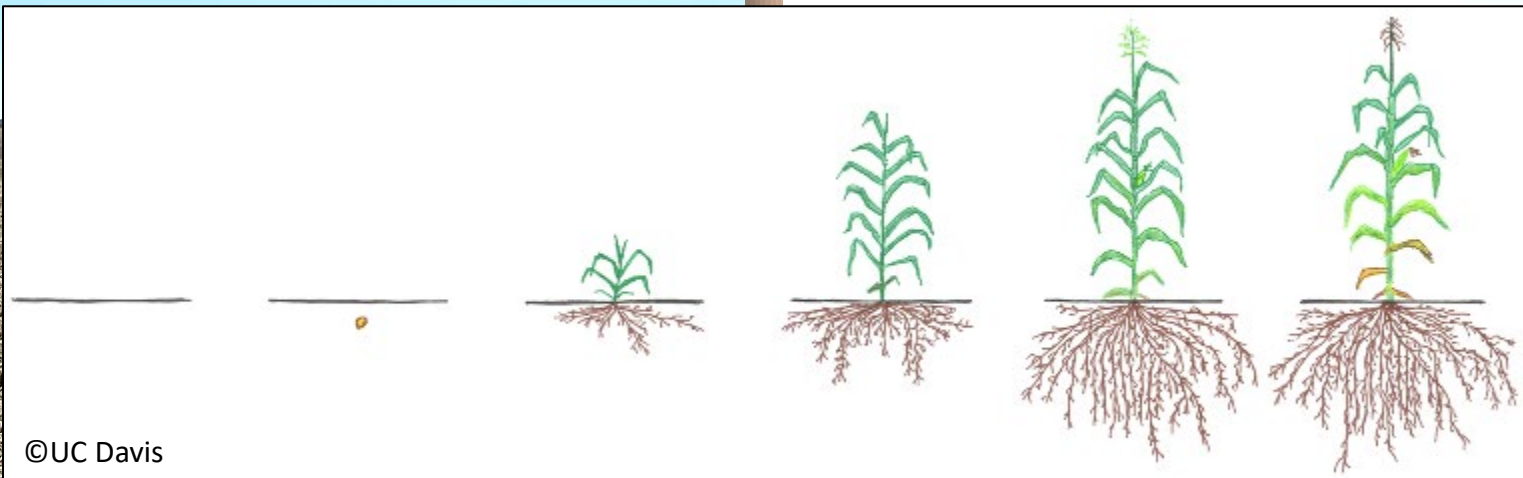
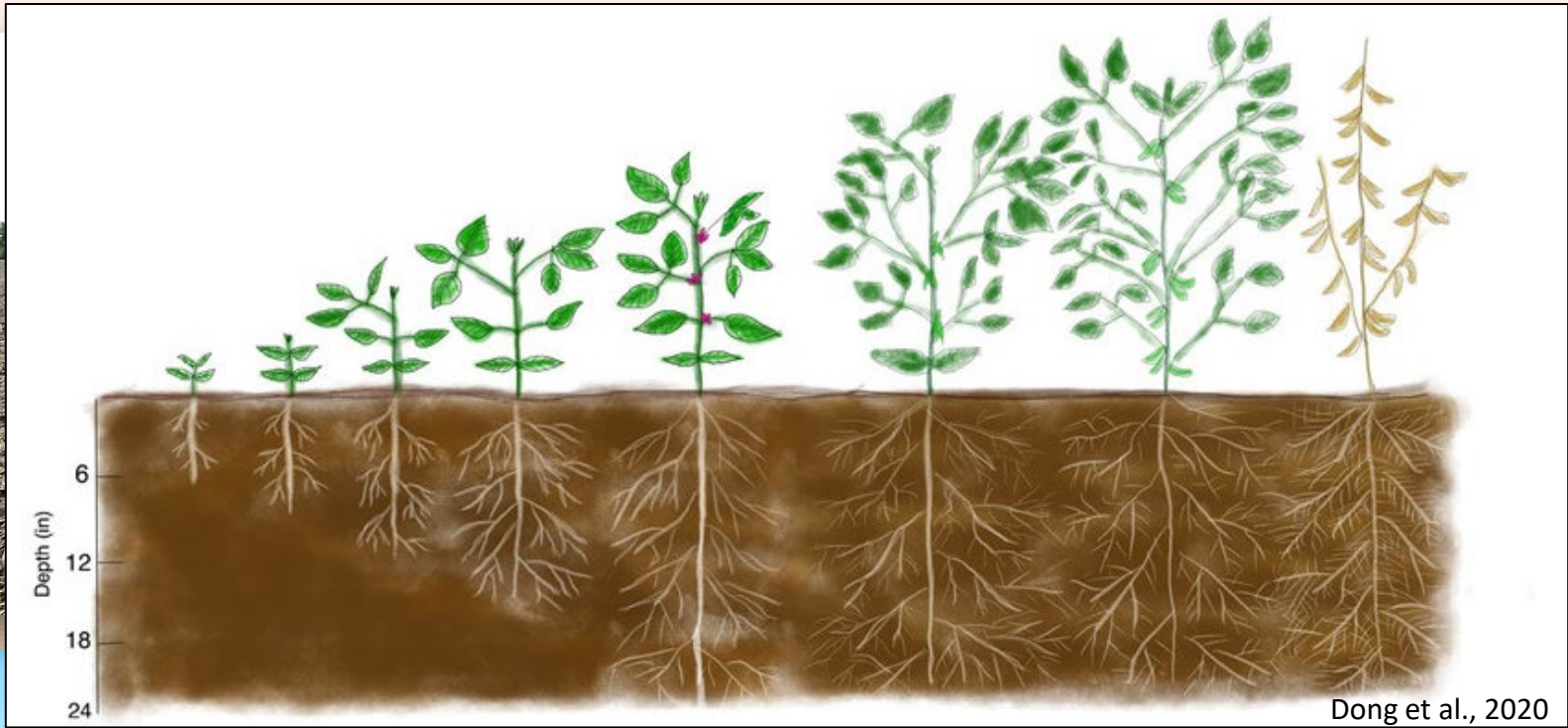
MOLLISOLS



Soil Formation: Current Vegetation



Soil Formation: Current Vegetation



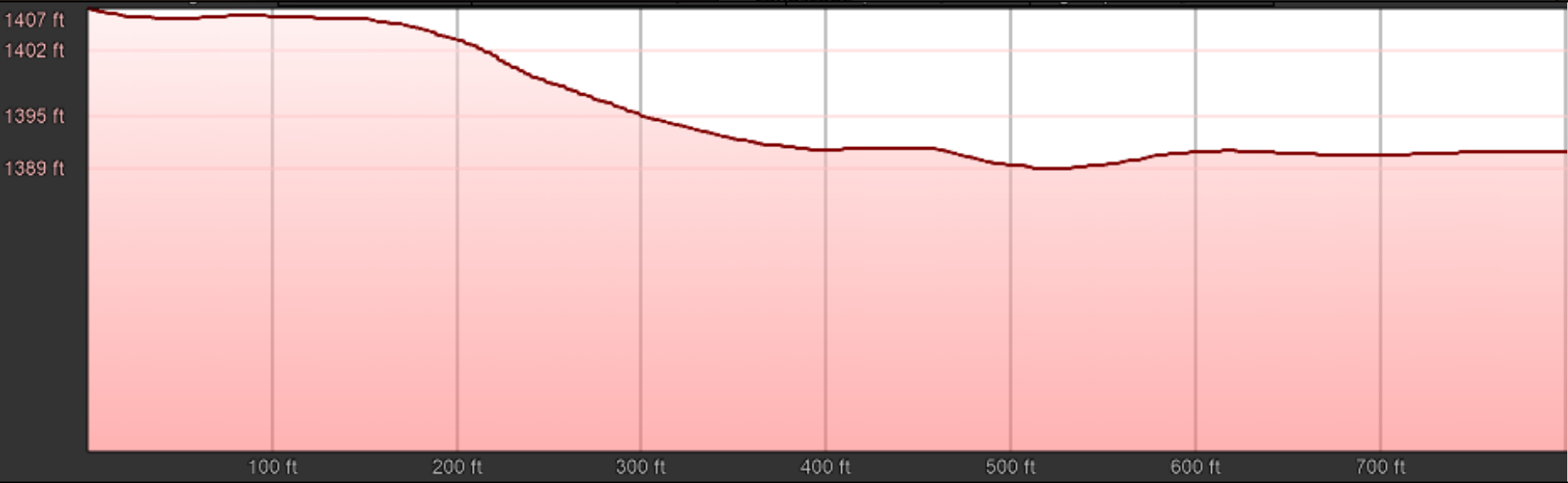
Soil Formation: **Prairie Soils**



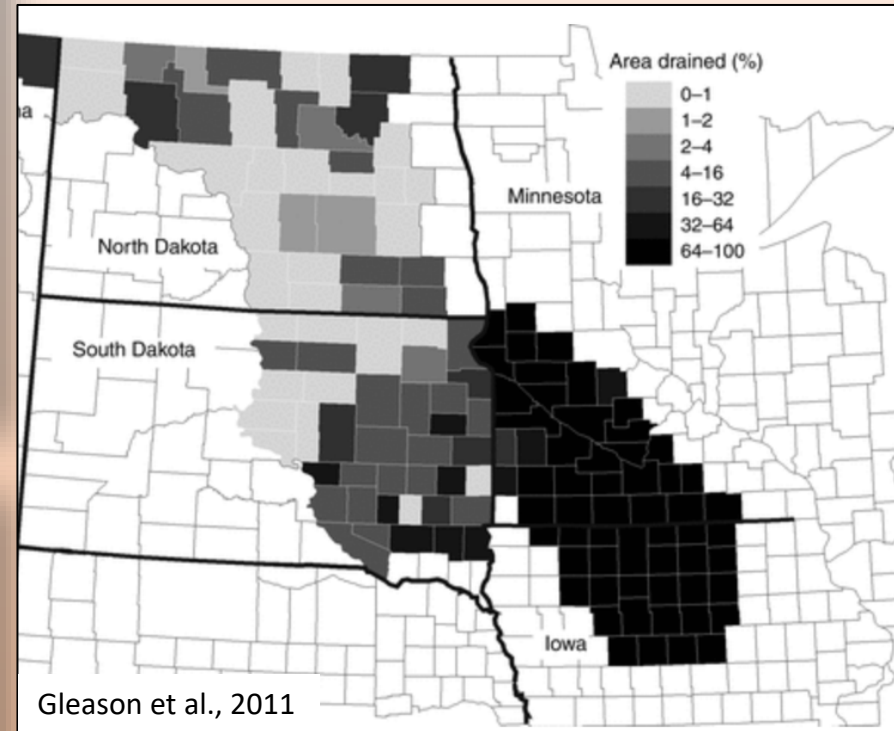
Soil Formation: **Cropland Soils**



Soil Formation: Soil Toposequences



Soil Formation: Soil Drainage



Thank You!!

