

Nebraska Soils

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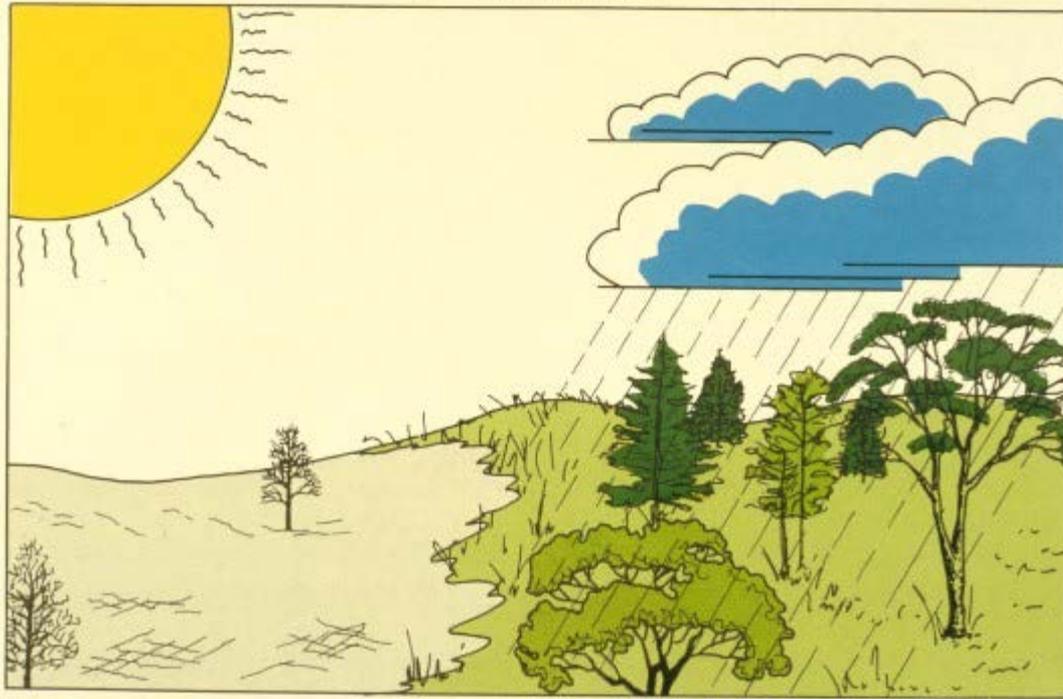
Soil Forming Factors

Soil = CLORPT

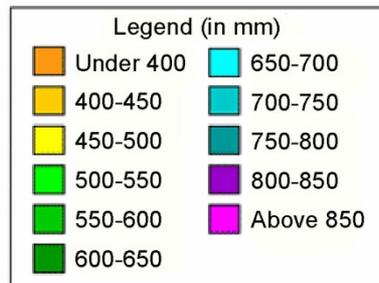
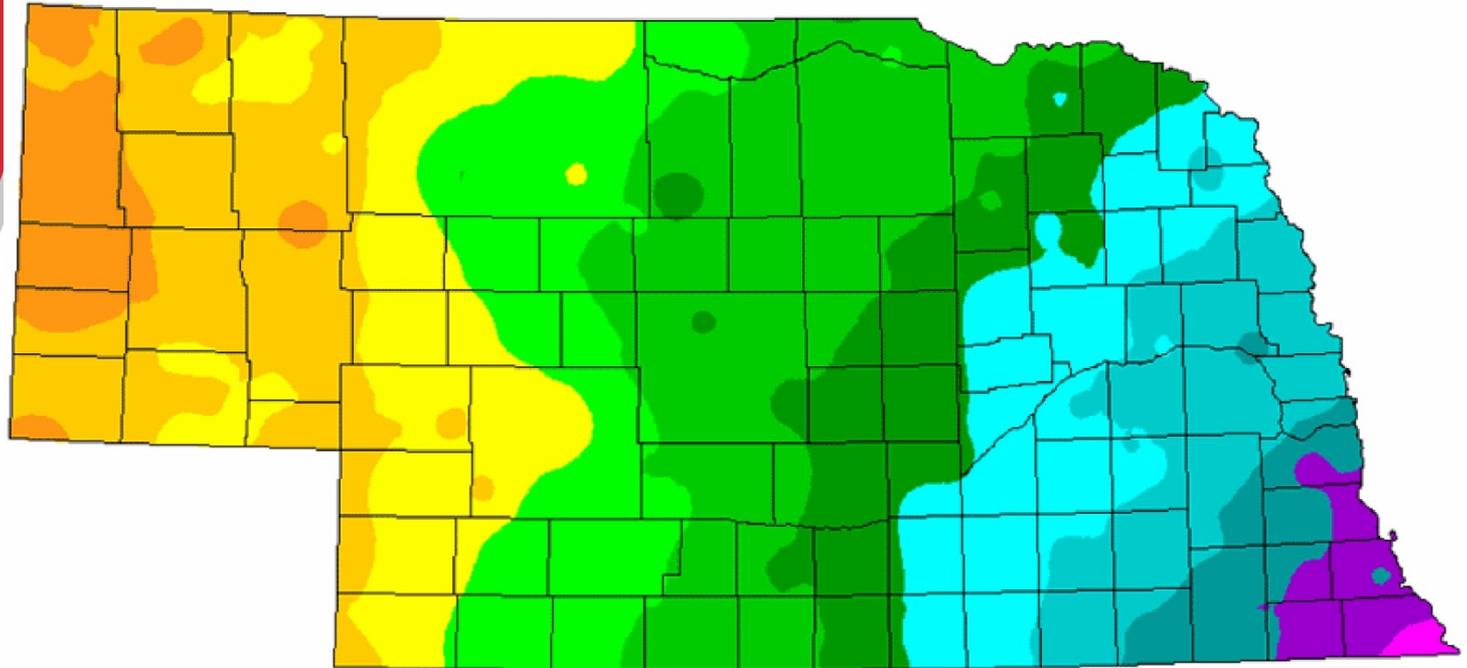
- Climate
- Organisms/Biota
- Relief (Topography)
- Parent Material;
- Time (Stability)



CLIMATE



Climate: Precipitation



This is a map of annual precipitation averaged over the period 1961-1990. Station observations were collected from the NOAA Cooperative and USDA-NRCS SnoTel networks, plus other state and local networks. The PRISM modeling system was used to create the gridded estimates from which this map was made. The size of each grid pixel is approximately 4x4 km. Support was provided by the NRCS Water and Climate Center.

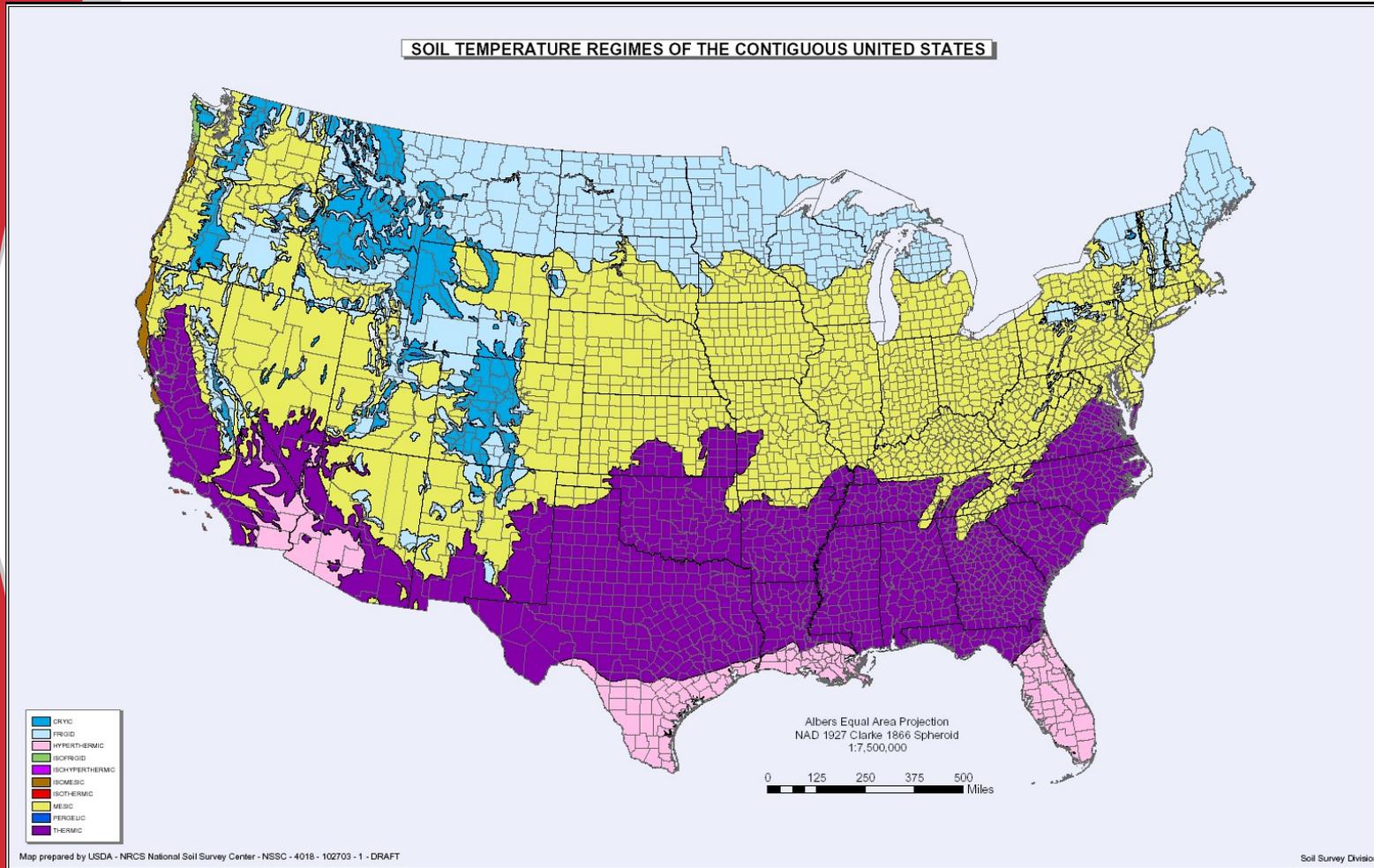
For information on the PRISM modeling system, visit the SCAS web site at <http://www.ocs.orst.edu/prism>

The latest PRISM digital data sets created by the SCAS can be obtained from the Climate Source at <http://www.climatesource.com>

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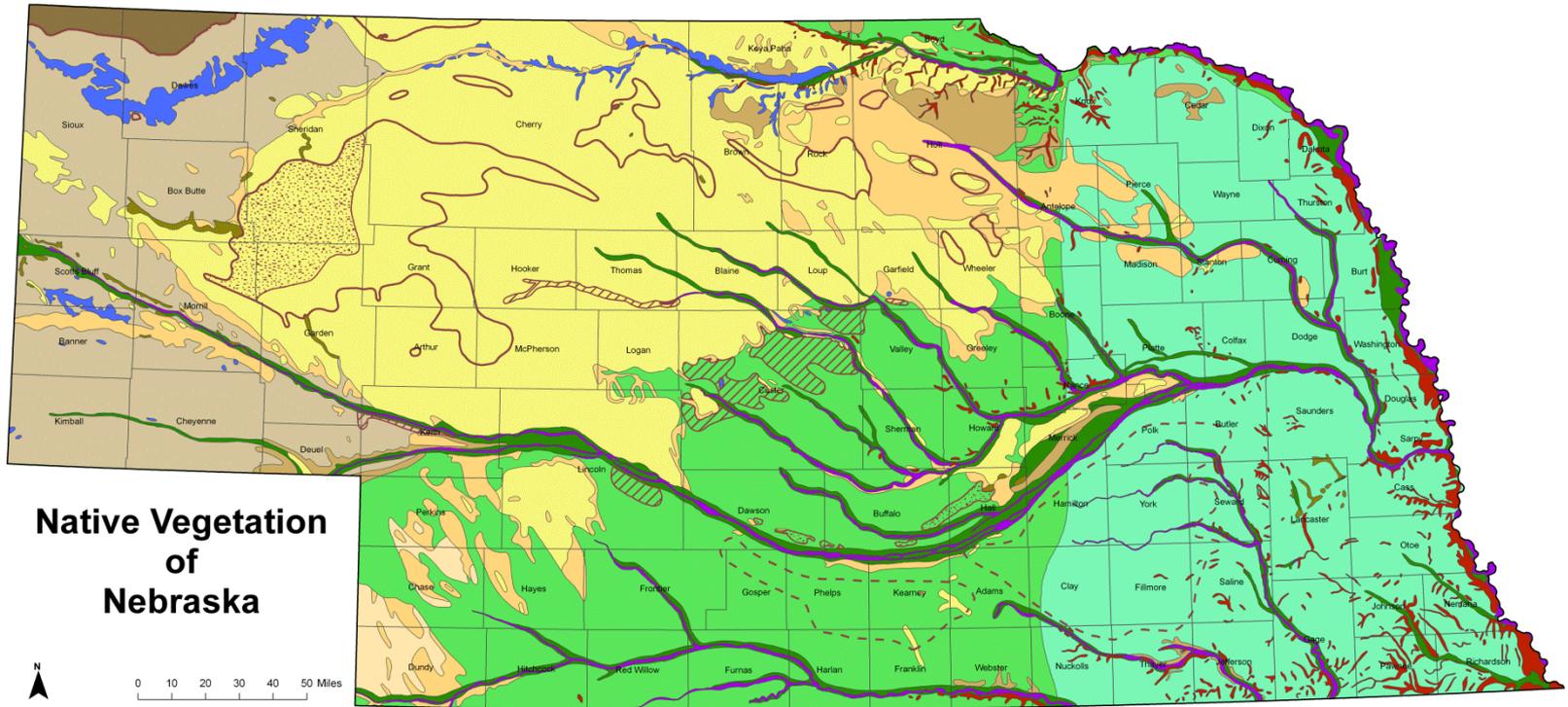


Temperature Regime



BIOTA





Native Vegetation of Nebraska



0 10 20 30 40 50 Miles

Forests and Savannas

- Ponderosa Pine Forests and Savannas
- Red Cedar Forest and Savanna
- Riparian Deciduous Forests
- Upland Deciduous Forests

Aquatic Vegetation

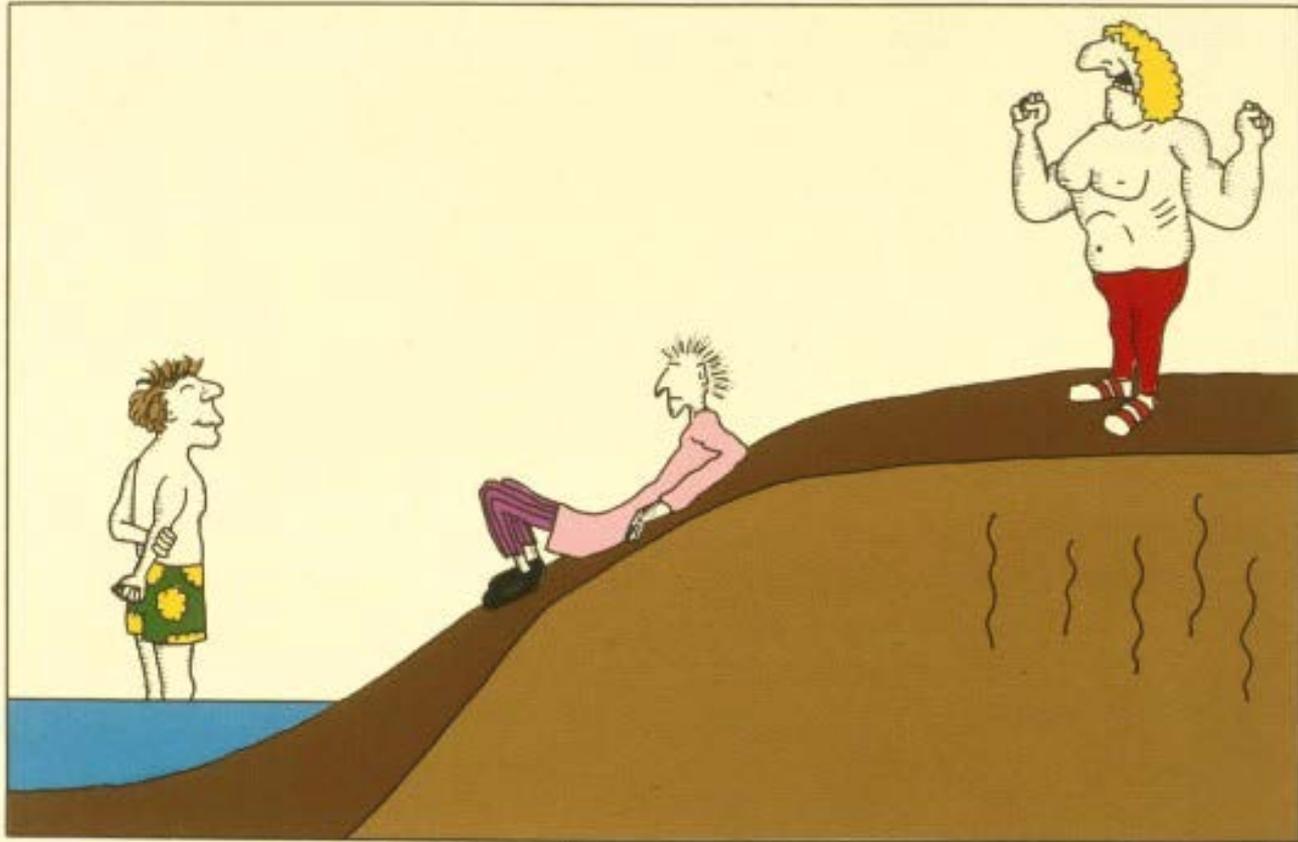
- Lakes, Ponds, Marshes and Fens
- Rainwater Basins
- Scattered Salt Marshes and Flats
- Salt Marsh and Flats

Grasslands

- Upland Tallgrass Prairie
- Lowland Tallgrass Prairie
- Loess Mixed-grass Prairie
- Sandhills Mixed-grass Prairie
- Sandsage Mixed-grass Prairie
- Sandhills Borders Mixed-grass Prairie
- Gravelly Mixed-grass Prairie
- Shale Mixed-grass Prairie
- Mosaic of Mixed-grass/Shortgrass Prairie

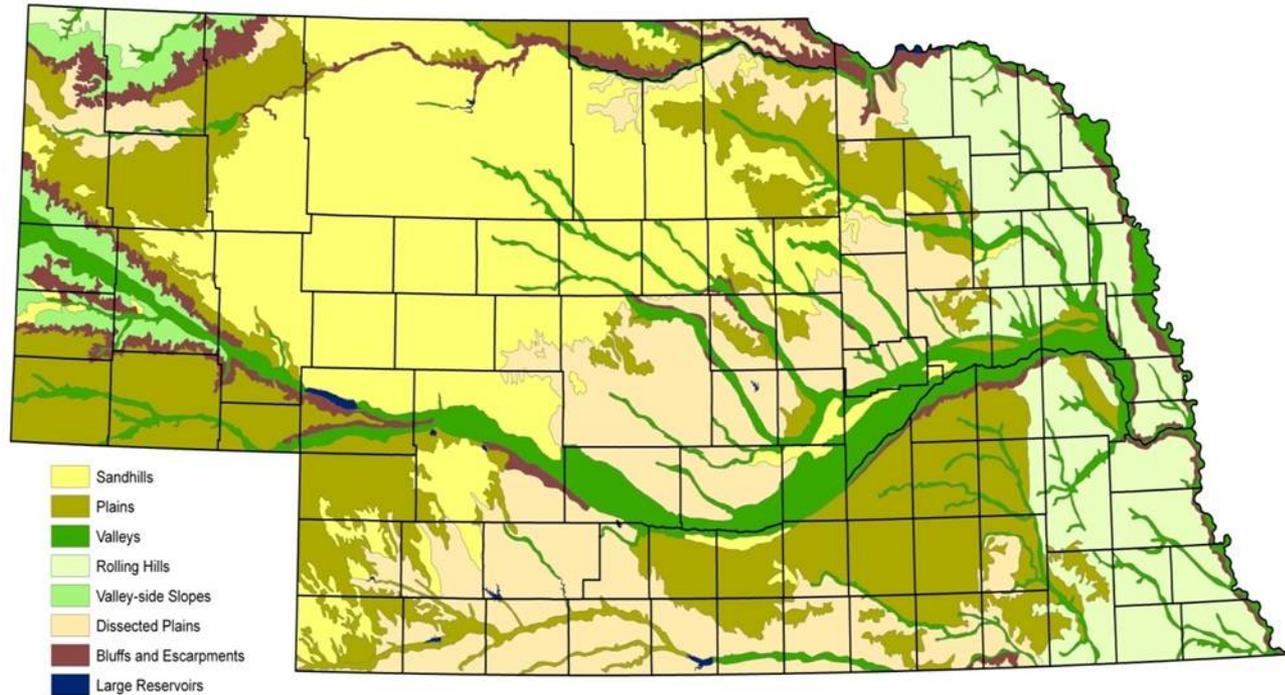


RELIEF

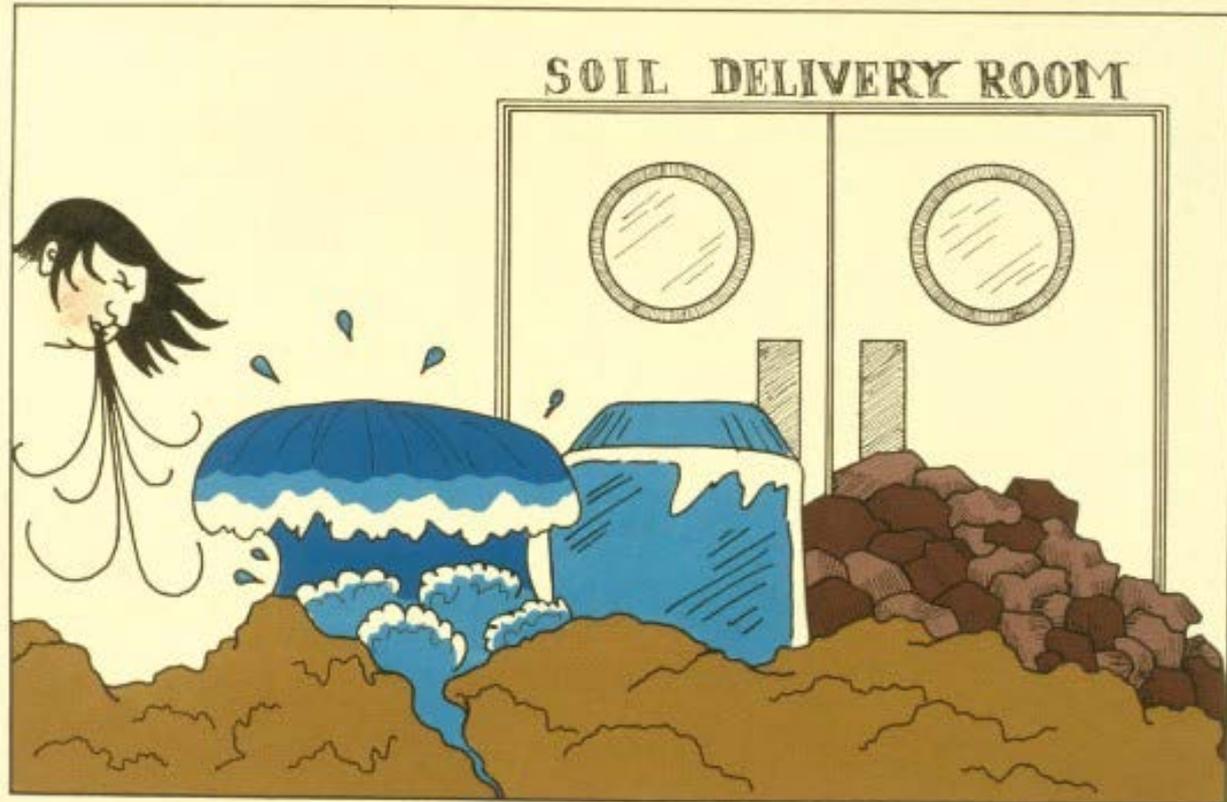


Relief

Topographic Regions



PARENT MATERIAL

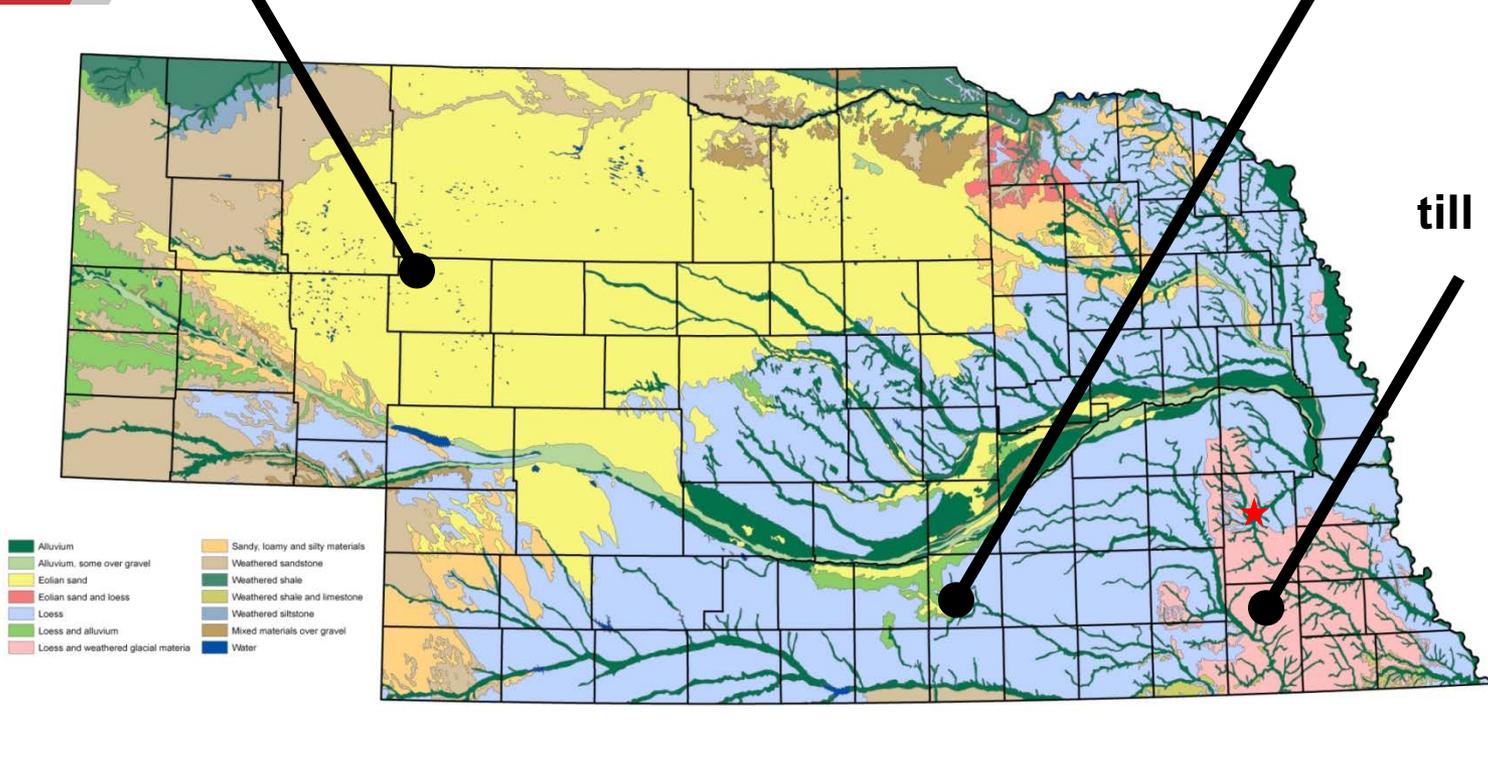


Soil Parent Materials in Nebraska

eolian sand

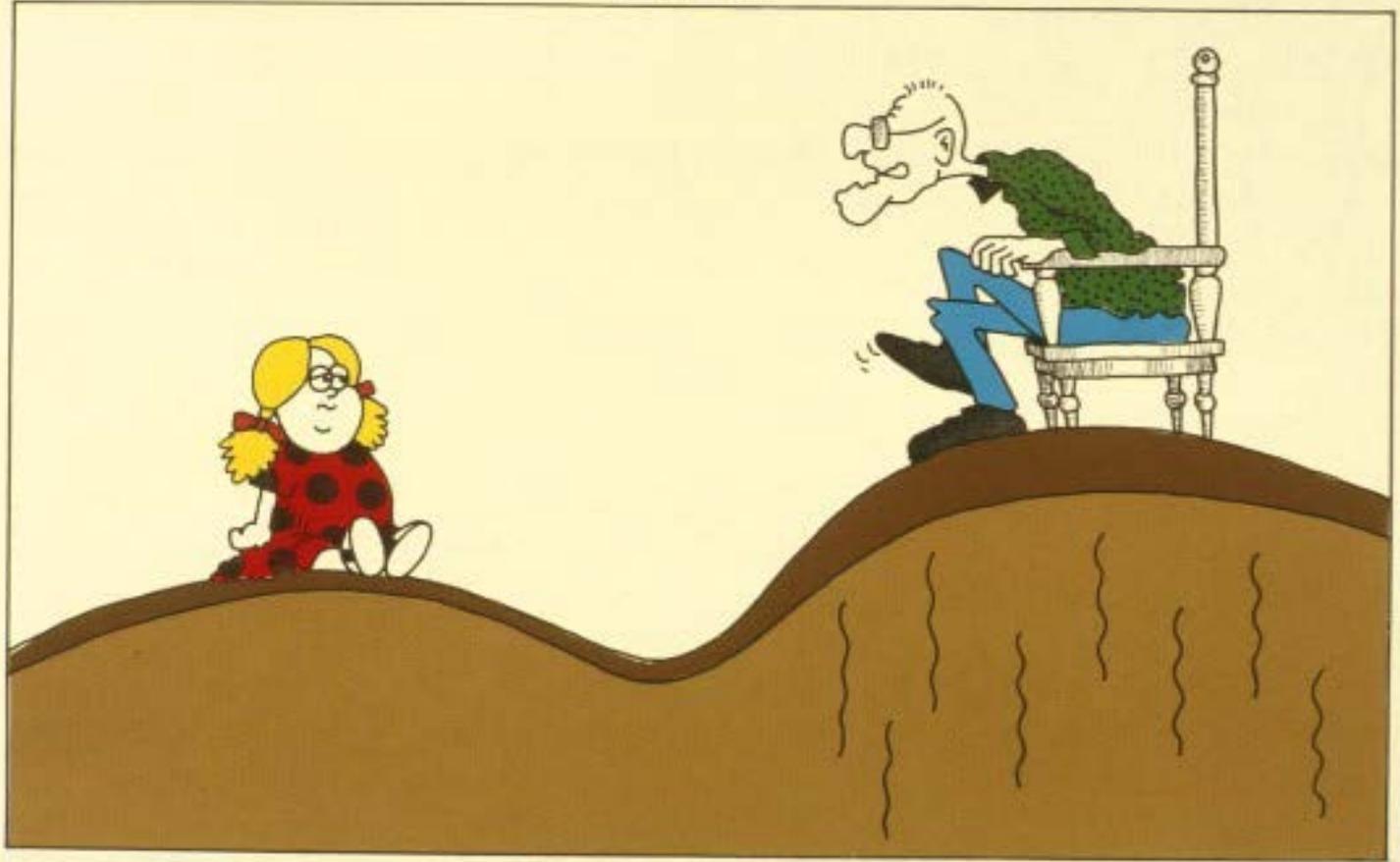
loess

till



- | | | | |
|---|--------------------------------------|---|----------------------------------|
|  | Alluvium |  | Sandy, loamy and silty materials |
|  | Alluvium, some over gravel |  | Weathered sandstone |
|  | Eolian sand |  | Weathered shale |
|  | Eolian sand and loess |  | Weathered shale and limestone |
|  | Loess |  | Weathered siltstone |
|  | Loess and alluvium |  | Mixed materials over gravel |
|  | Loess and weathered glacial material |  | Water |

AGE



Geologic Time

Generalized Geologic and Hydrostratigraphic Framework of Nebraska 2011, ver. 2

J.T. Korus and R.M. Joeckel, Conservation and Survey Division, SNR, UN-L

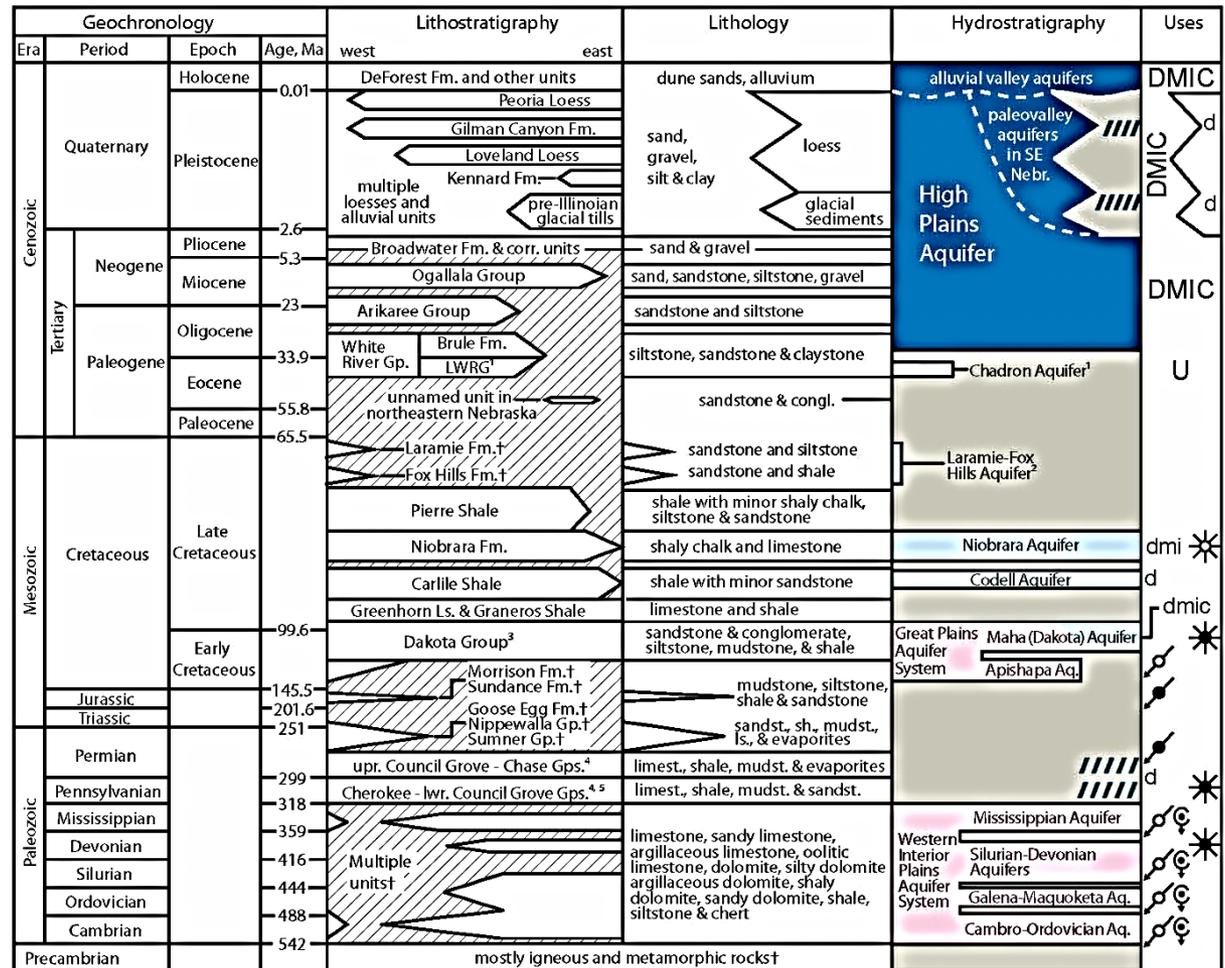
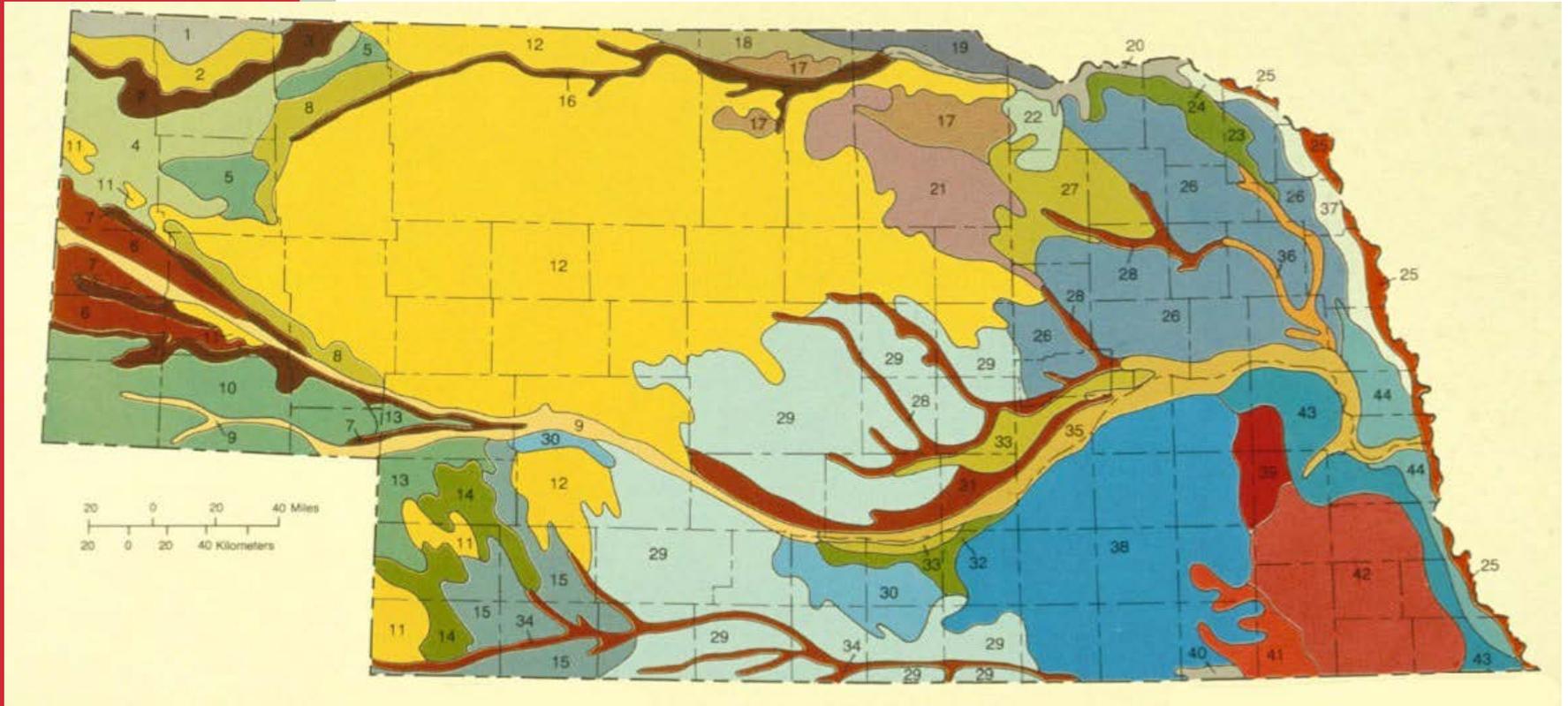


Diagram is not to scale relative to geologic time and stratigraphic thicknesses.



General soil map



Typical Western Nebraska Soil

(FINE-SILTY, CALCAREOUS, ARIDIC USTORTHENTS)



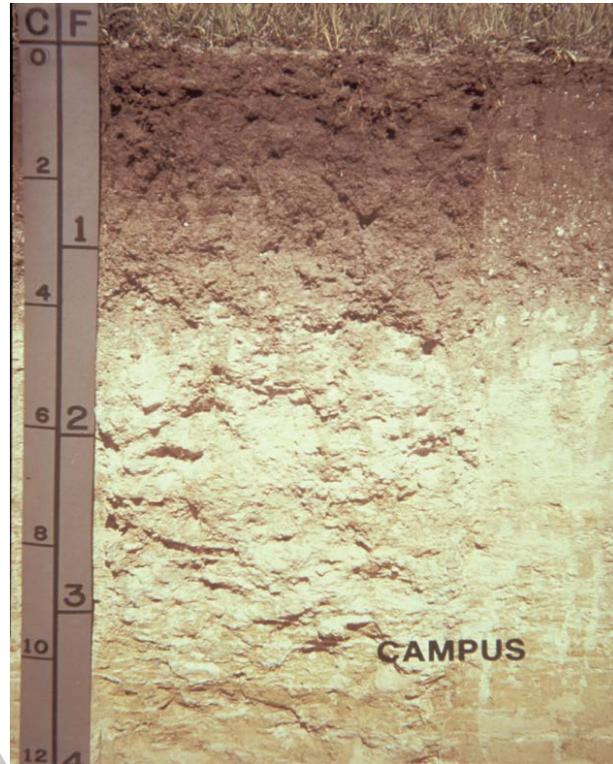
Typical Western Nebraska Soil

(FINE-LOAMY, CALCIDIC ARGIUUSTOLLS)

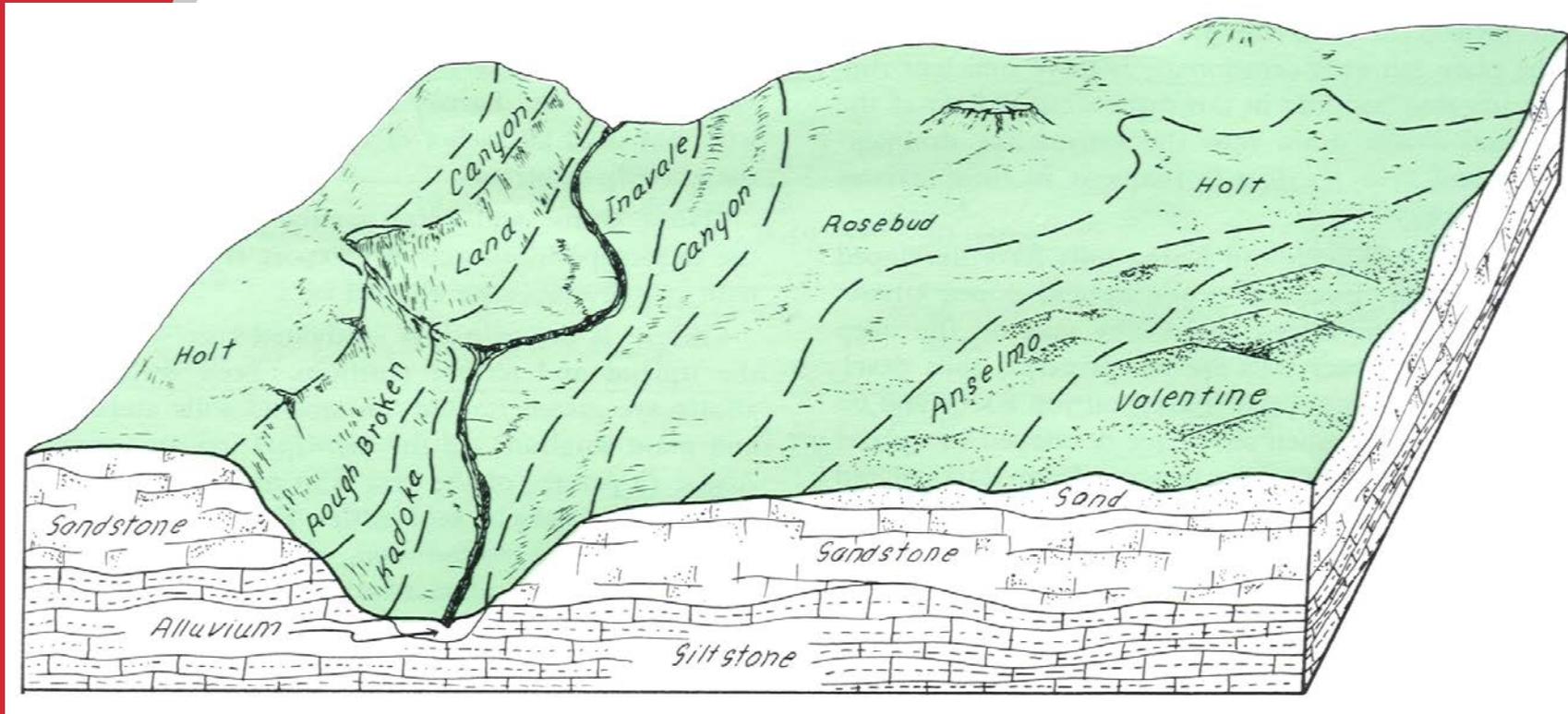


Typical Western Nebraska Soil

(FINE-LOAMY, MIXED, MESIC TYPIC CALCIUSTOLLS)



Western Nebraska Geomorphology



Typical Nebraska Sandhills Soil

(TYPIC USTIPSAMMENTS)

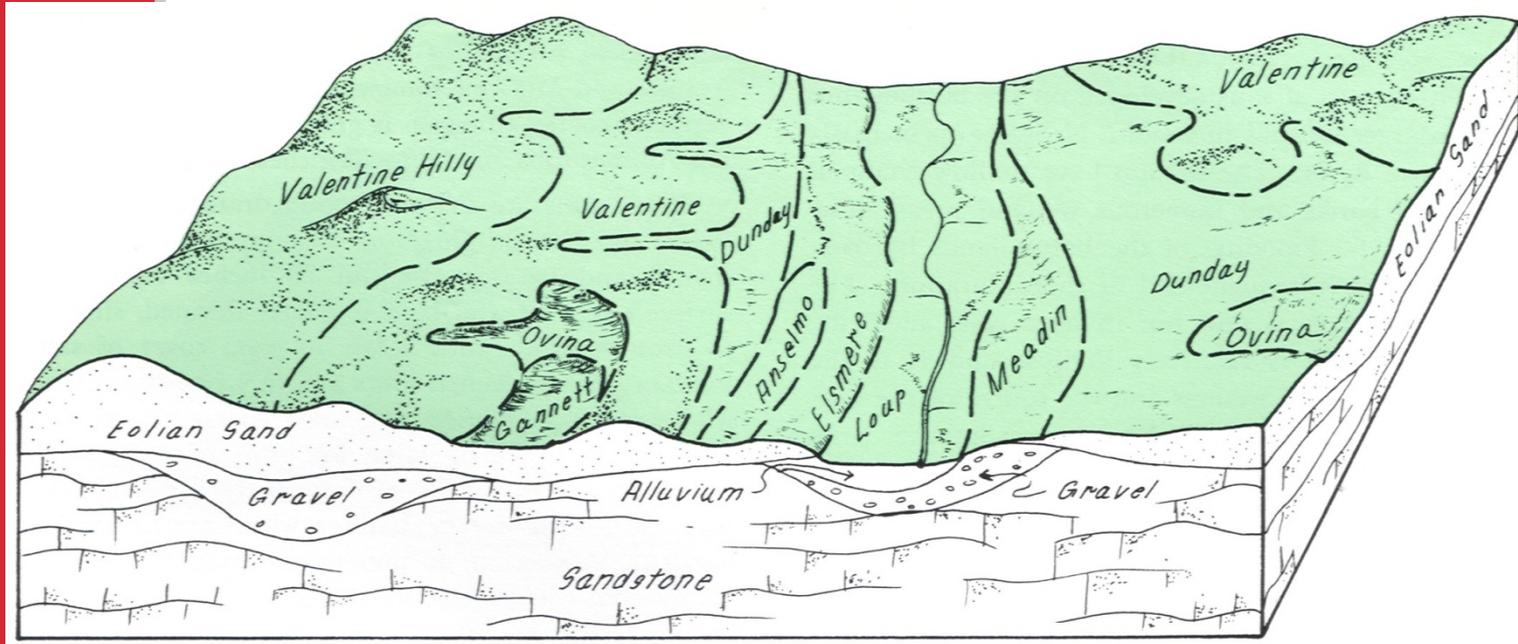


Typical Wet Nebraska Sandhills Soil

(SANDY, MIXED, MESIC TYPIC ENDOAQUOLLS)

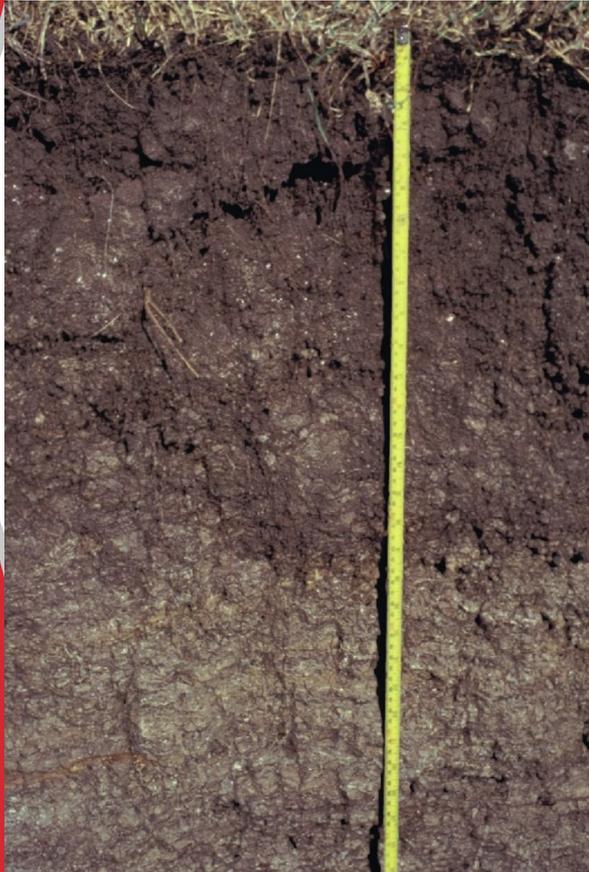


NE Sandhills Geomorphology



Typical North Central Nebraska Soil

(FINE, SMECTITIC, MESIC ARIDIC LEPTIC HAPLUSTERTS)

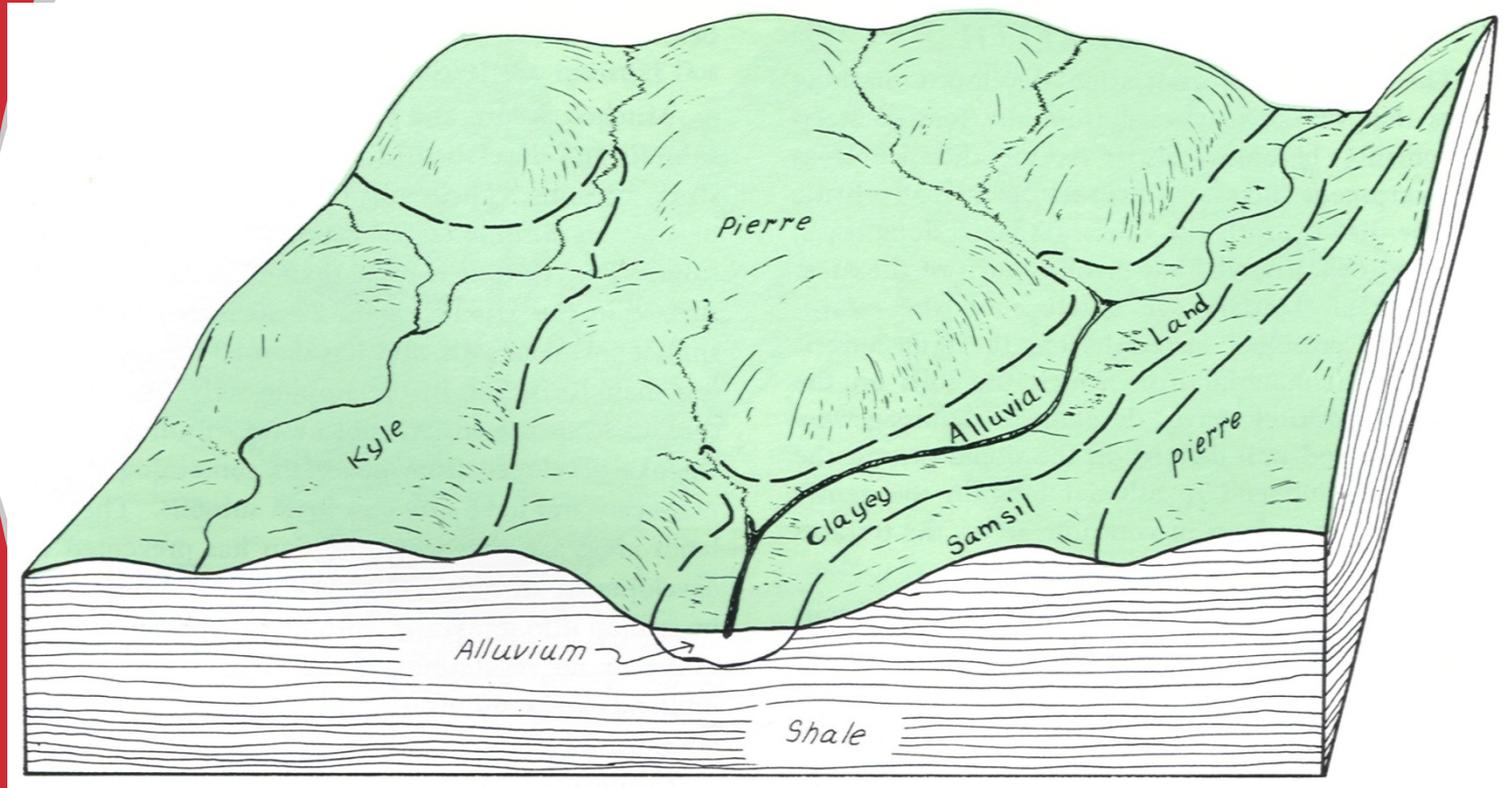


Typical Bottomland Soil

(SANDY, TYPIC USTIFLUVENTS)



Northern Nebraska Geomorphology



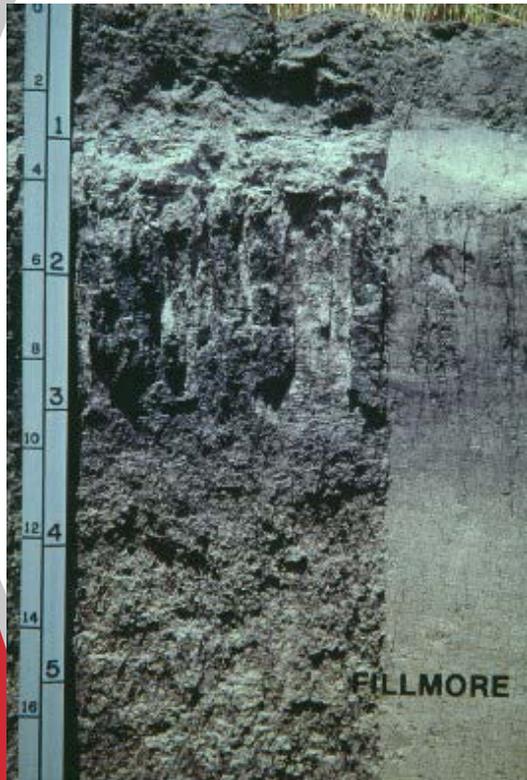
Typical Terrace Soil

(FINE-SILTY, PACHIC ARGIUUSTOLLS)



Typical Soil In A Depression

(FINE, VERTIC ARGIALBOLLS)



Typical Central Nebraska Soil

(FINE-SILTY, TYPIC ARGIUUSTOLLS)

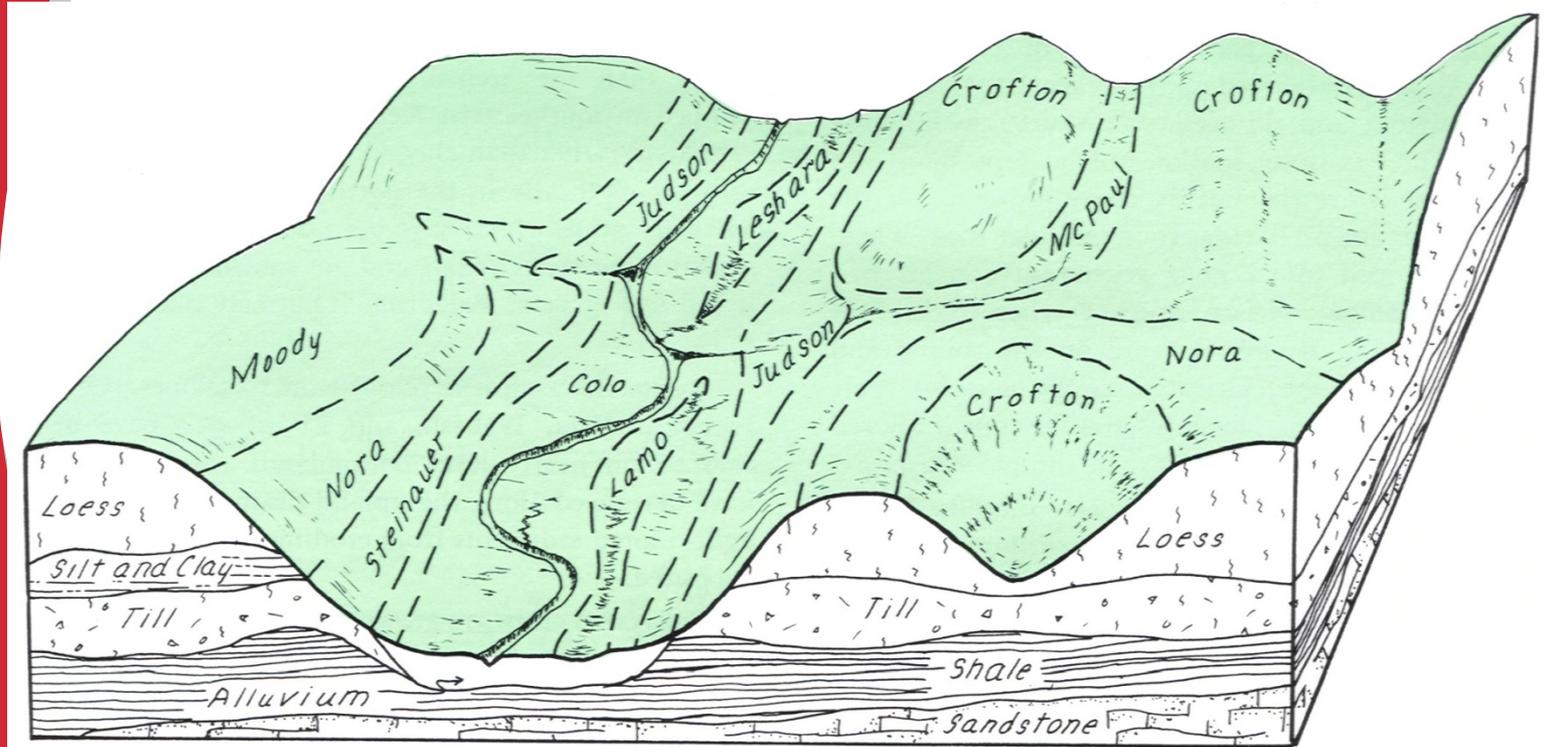


Typical Northeast Nebraska Soil

(FINE-SILTY, UDIC HAPLUSTOLLS)



Northeast Nebraska Geomorphology



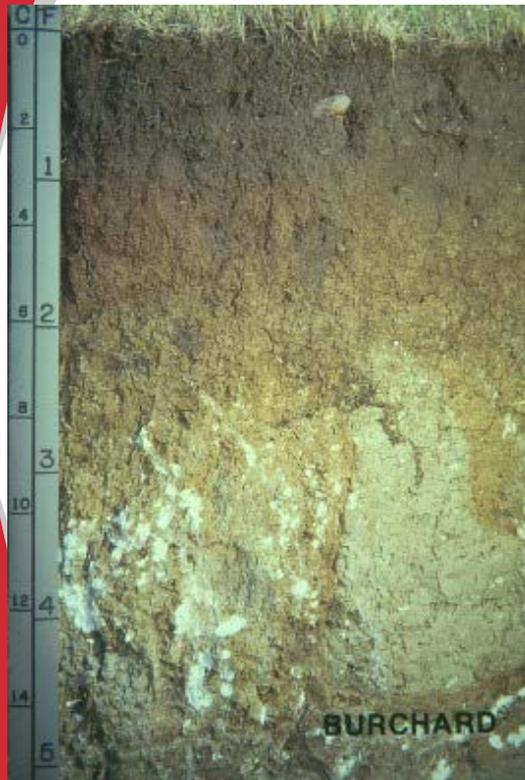
Typical Steeply Sloping Southeast Nebraska Soil

(FINE-LOAMY, TYPIC UDORTHENT)



Typical Moderately Sloping Southeast Nebraska Soil

(FINE-LOAMY, TYPIC ARGIUUDOLLS)



Typical Gently Sloping Southeast Nebraska Soil

(FINE, VERTIC ARGIUUDOLLS)



Southeast Nebraska Geomorphology

