

Soil Textures

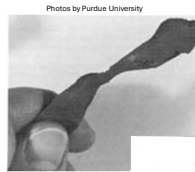
- Texture in the field
- SAND
- SILT/LOAM
- CLAY
- COMBINATION of the 3



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How to Texture

- Ribboning
 - Sand- no ribbon
 - Silt/Loam- short ribbon that breaks
 - Clay- long ribbon
- Grit
 - Take small amount of soil
 - Wet in the palm of your hand
 - Smooth, silky, gritty

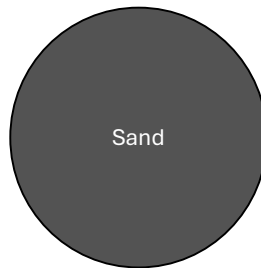


WHAT TYPE OF SOIL DO YOU HAVE AT HOME?

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Who Cares?

- SAND
- SILT (LOAM)
- CLAY



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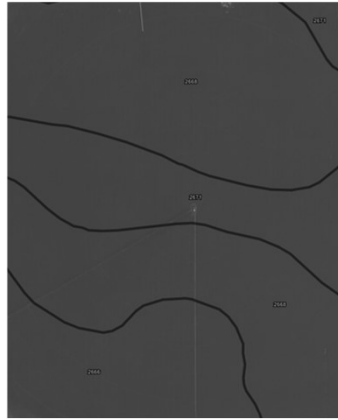
Soil Profiles



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Soil Maps- Helpful before Sampling

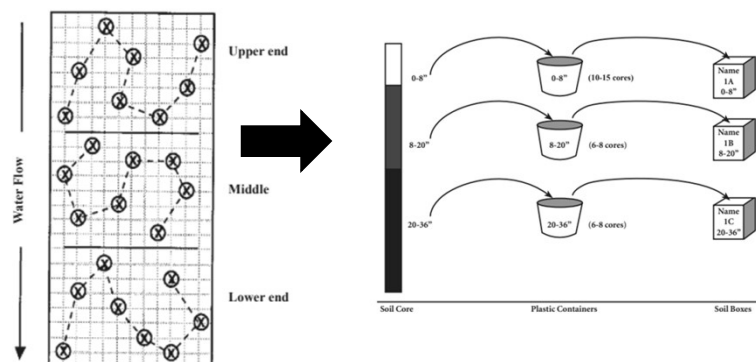
- Web Soil Survey



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How to Take a “Good” Soil Sample

- Representative
- Organize (no clerical errors)
- Don't “cook” soil samples
 - Air dry



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Grid Sampling & Precision Ag

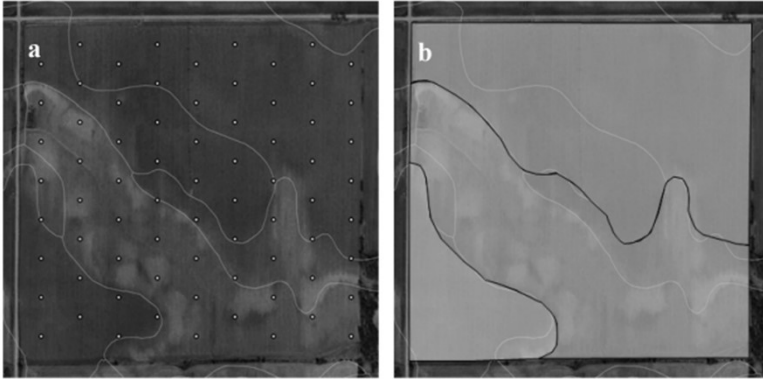


Figure 2. Examples of grid and management zone approaches to collecting soil samples. *Figure 2a* has 72 sample points. Within each of the three management zones in *Figure 2b*, 10-15 cores should be collected and composited into a sample representing each zone.

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Soil Sample Results

- Break into 3 groups
 - Amy Timmerman
 - Leslie Johnson
- Take your soil results (or pick up an example)

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Soil Sampling Resources

- Extension Crop Educator or Specialist
- Guidelines for Soil Sampling (NebGuide G1740)
 - <https://extensionpubs.unl.edu/publication/g1740/2007/pdf/view/g1740-2007.pdf>
- Ribboning for Soil Texture
 - <https://www.youtube.com/watch?v=2FjxKnJURBI>
- CropWatch.unl.edu/Soils
- Nutrient Management for Agronomic Crops in Nebraska (EC155)
 - [ec155-2023.pdf](#)

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Soil Health

- Soil is covered (75% or more)
- Residual is breaking down
- No surface crusts or ponding
- Granular soils (no plates)
- Soil compaction- “soft” soils
- Soil color is darker
- Biological diversity
- Biopores (roots, earthworm tunnels)

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Nutrient Values on Soil Reports

These are not recommendations

- pH- 6 to 7.3 (depending on crop)
- Organic Matter (OM%)- varies, higher the better
- Nitrogen (KCl Nitrate)- 5 ppm or less (when dormant)
 - Must do deep soil sampling and testing for nitrogen.
- Phosphorus (P)- depends on crop
- Potassium (K)- want over 125 ppm
- Sulfur- check to see if you need applications
- Trace elements
- CEC- higher the number, the more clay content

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Agricultural Producer Survey on Cancer Health

Are you 40-50-year-old?

Are you a farmer or rancher?

Take a short survey (10-25 minutes) to help with cancer research!

You will receive \$20 gift card in mail

Any question? Contact Dr. Shinobu Watanabe-Galloway (swatanabe@unmc.edu) at University of Nebraska Medical Center



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