## Monticello-University of Virginia Archaeological Field School 2023

Review: Weeks 3 and 4

# 1. Concepts: How have the following figured in our Monticello research? More general, how can they be helpful in advancing our understanding of past dynamics, based on archaeological evidence?

- geoarchaeology
- paleoethnobotany
  - palynology
  - pollen diagram
  - phytoliths
  - macrobotanicals
- Paw Paw dating methods: 210-Pb , 14-C, Optically Stimulated Luminescence (OSL)
  - radiocarbon date calibration
- dendrochronology
  - causes of tree-ring width variation
  - ecological succession
- interpolation
  - spatial autocorrelation
  - variogram
  - inverse distance weighing
  - kriging

### 2. Field Trips: Observation and Interpretation

Describe and interpret the stratified sequences we saw in the Rivanna cut bank at Monasukapanough and the depositional and pedogenic processes responsible for the layers.

How do our field observations at the Monsukapanough, the Meadow Brach, and the Paw Paw provide evidence for ecological dynamics associated with tobacco cultivation and the transition to wheat?

How do those fields observation relate to the pollen, phytolith, chemical, lithostratigraphic, pedostratigraphic, and dating evidence from the Paw Paw Valley and the Slate Branch, covered in the "Monticello Geoarchaeology" lecture?

### 3. Fieldwork: Observation and Interpretation

Pick a quadrat at Site 30 that you recently excavated. Describe and interpret the layers you

saw in the profile. How do your observations mesh with our current understanding of the processes that created the layers?

### 4. Artifacts:

- Ceramics identification:
  - -materials (i.e., coarse earthenware, etc.), ware types (creamware, etc.), decoration (painted, printed, etc.)
- Ceramic date ranges
- All other artifacts
  - -pipes, glass, nails (materials, parts, manufacture)

Think back to our discussion of the DAACS database and interface - and the many sites/archaeological projects that use this system. What aspects of the DAACS database benefit archaeology as a discipline, and how can this enhance research and interpretation of data?