Recreating the Gehring Site: 10,000 years of Landform Evolution

By: Shannon Murphy

Background

Located on the SIUE Campus

Multioccupational Site

- Middle Woodland
- Emergent Mississippian
- Historic

Farmed during multiple occupations

Goals

Create a time line of landform evolution

Determine if landform change was the result of human occupation

Generate one line of evidence of change to be used in comparison with

- Paleoethnobotony
- Lithic Analysis
- Ceramic Analysis

Research Question:

How did the changing landscape of the Gehring Site affect human occupation?

Methods:

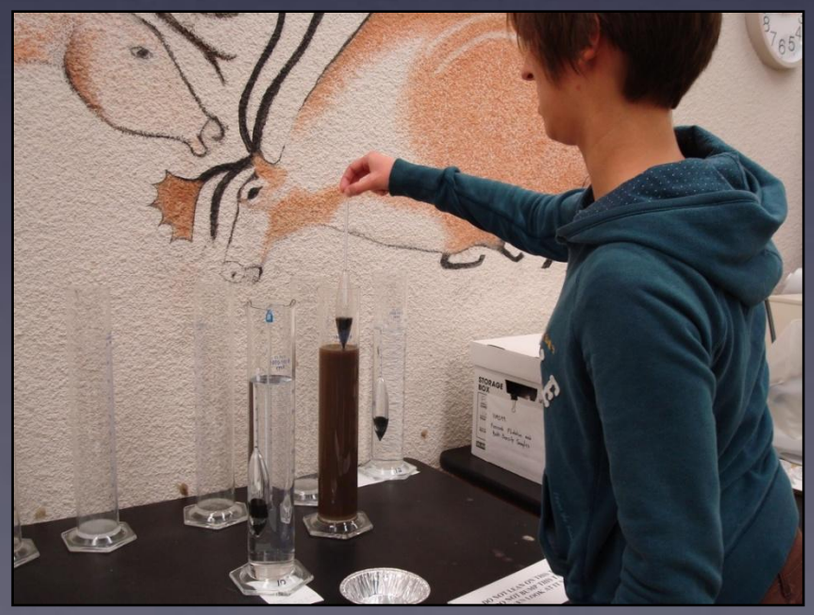
Particle Size Analysis

Feature Spatial Analysis

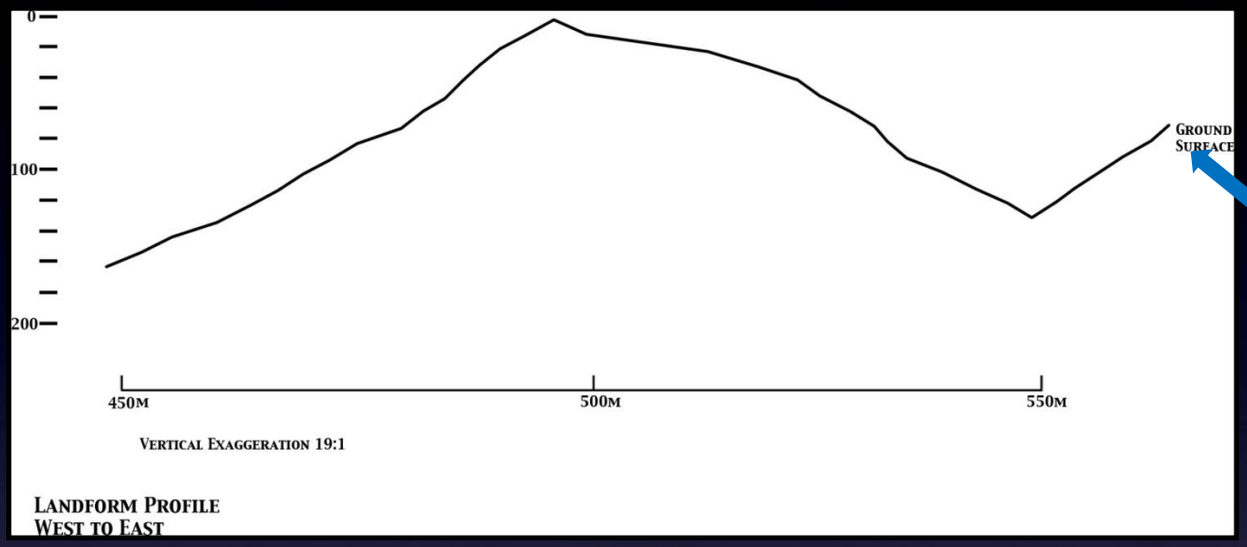
Aerial Photography

Particle Size Analysis

Measures sand and clay percentages



Maps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200
450M
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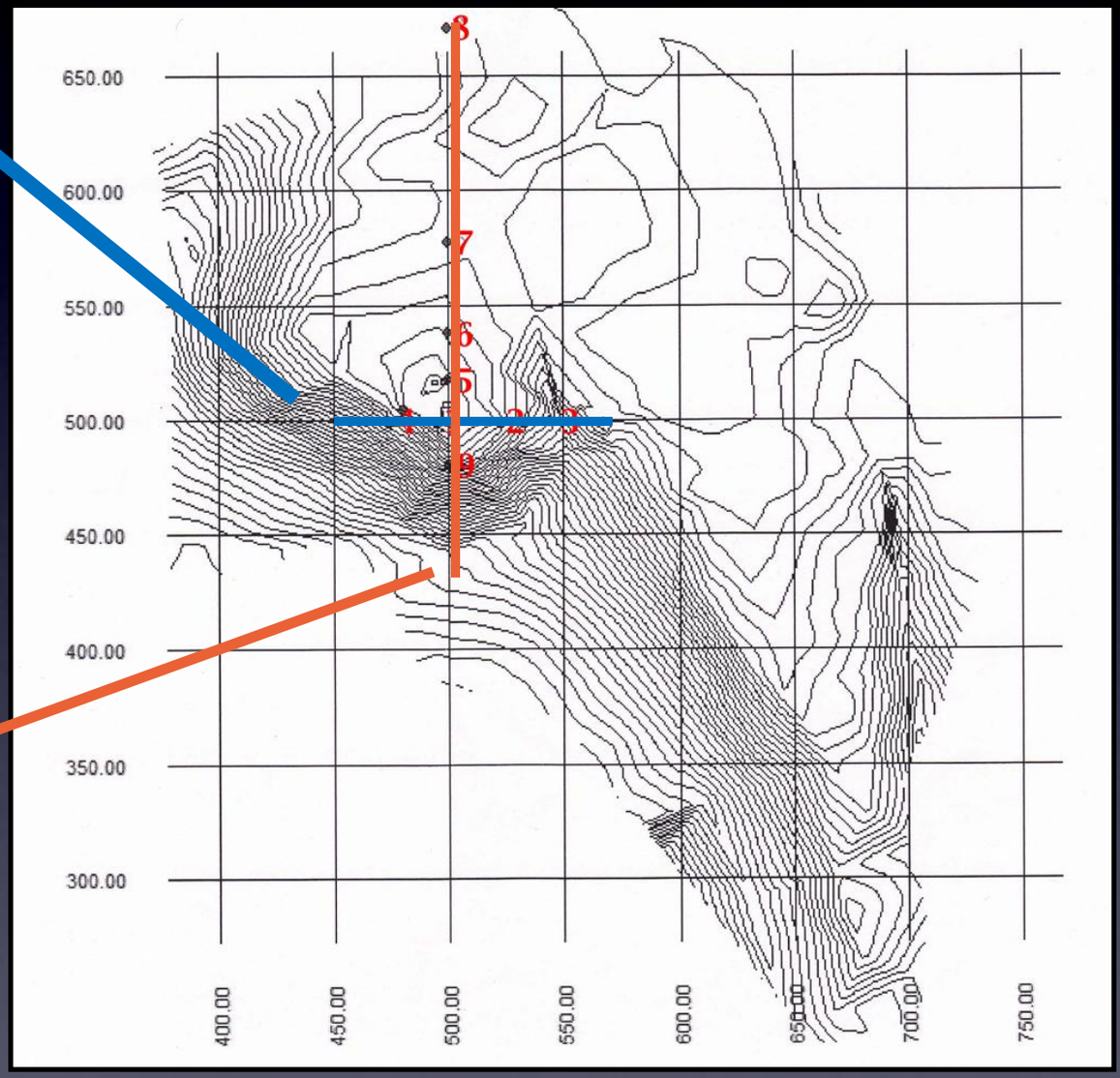
550M
GROUND SURFACE
VERTICAL EXAGGERATION 19:1
LANDFORM PROFILE
WEST TO EAST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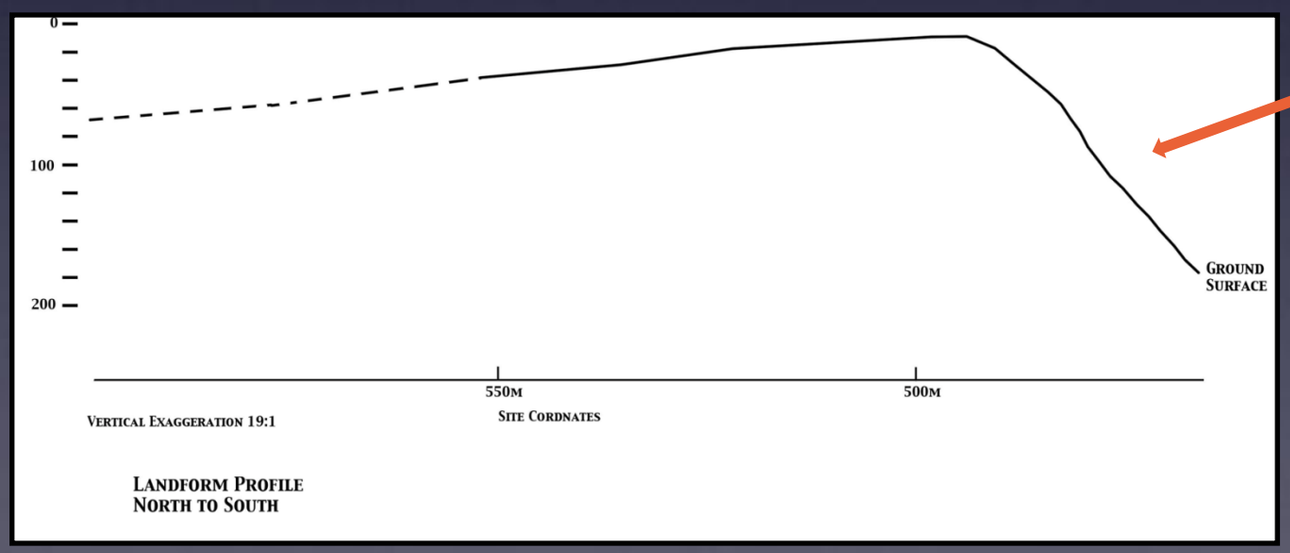
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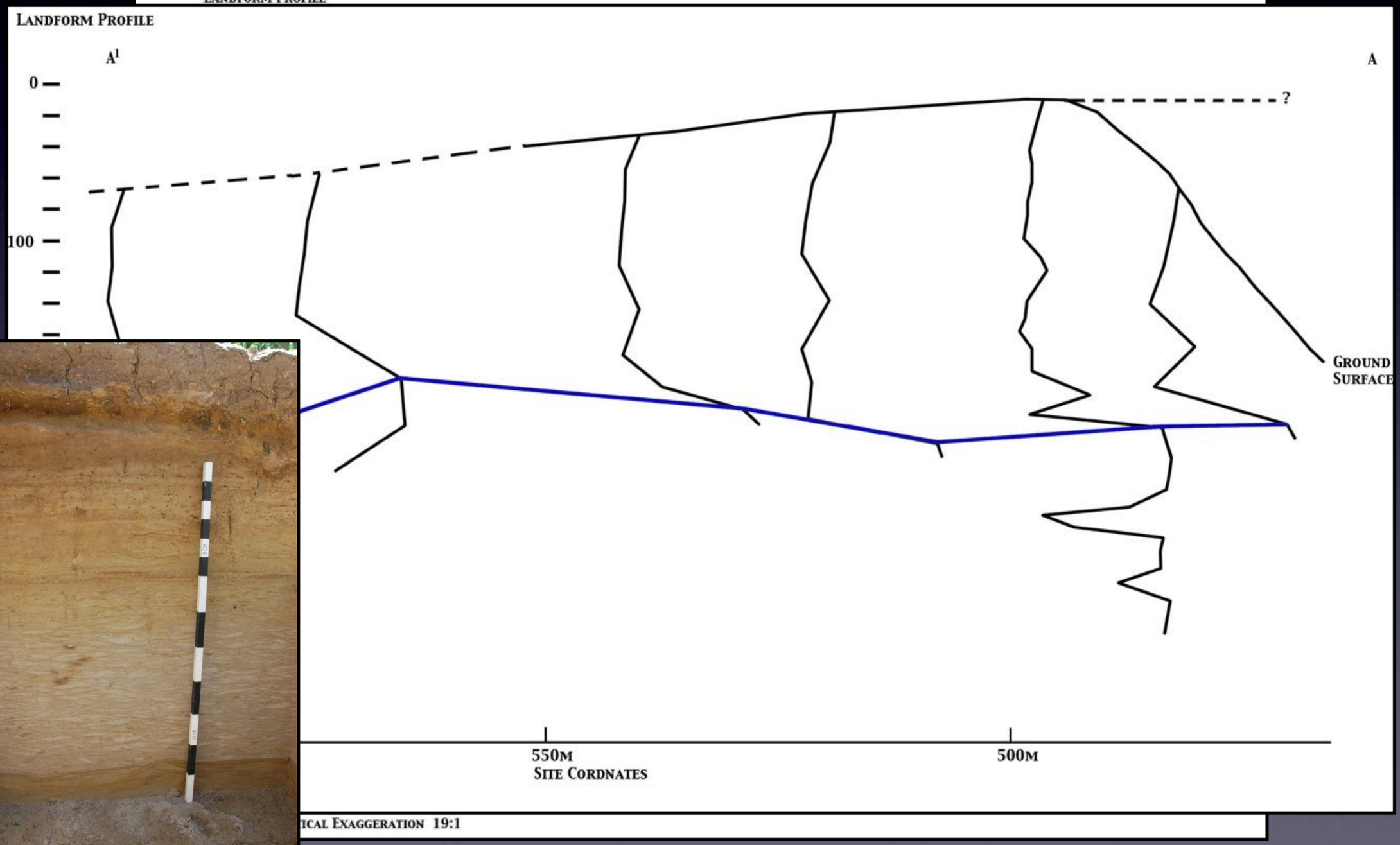
SITE CORDNATES
GROUND SURFACE
VERTICAL EXAGGERATION 19:1
LANDFORM PROFILE
NORTH TO SOUTH

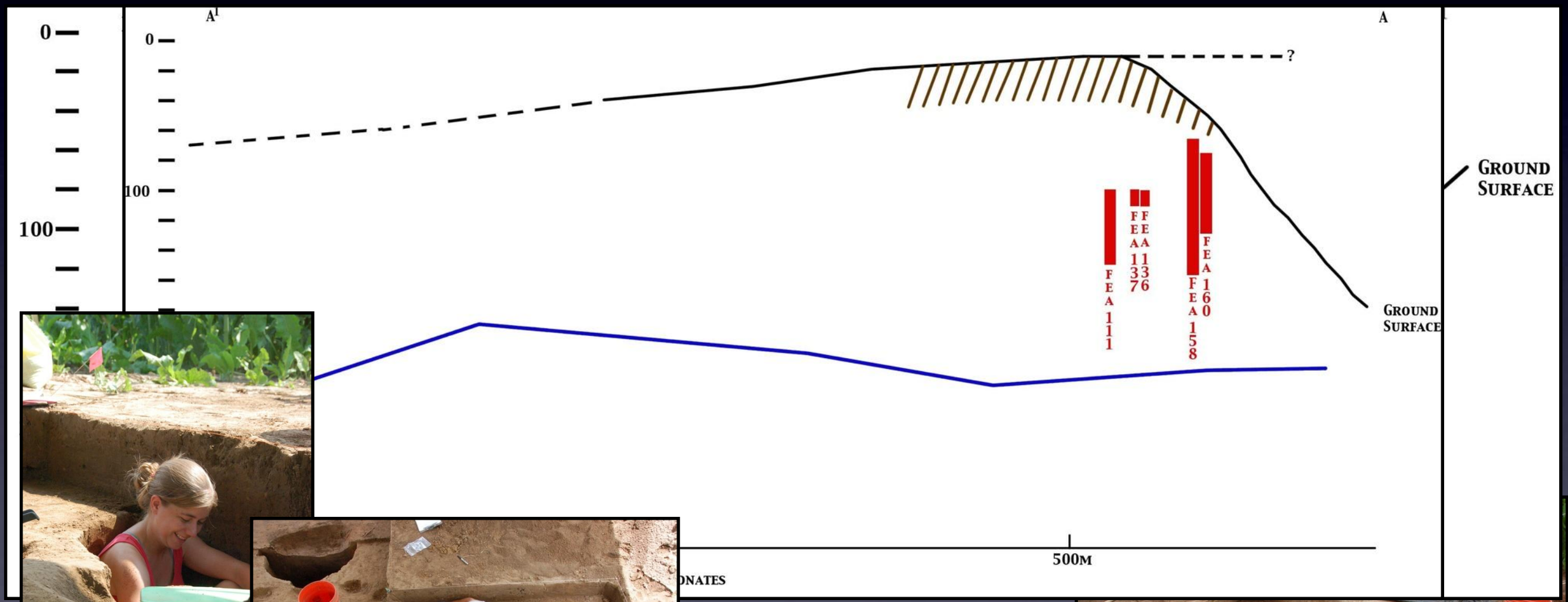
Early Holocene: 10,000 Years Ago

Particle Size Analysis: Sand



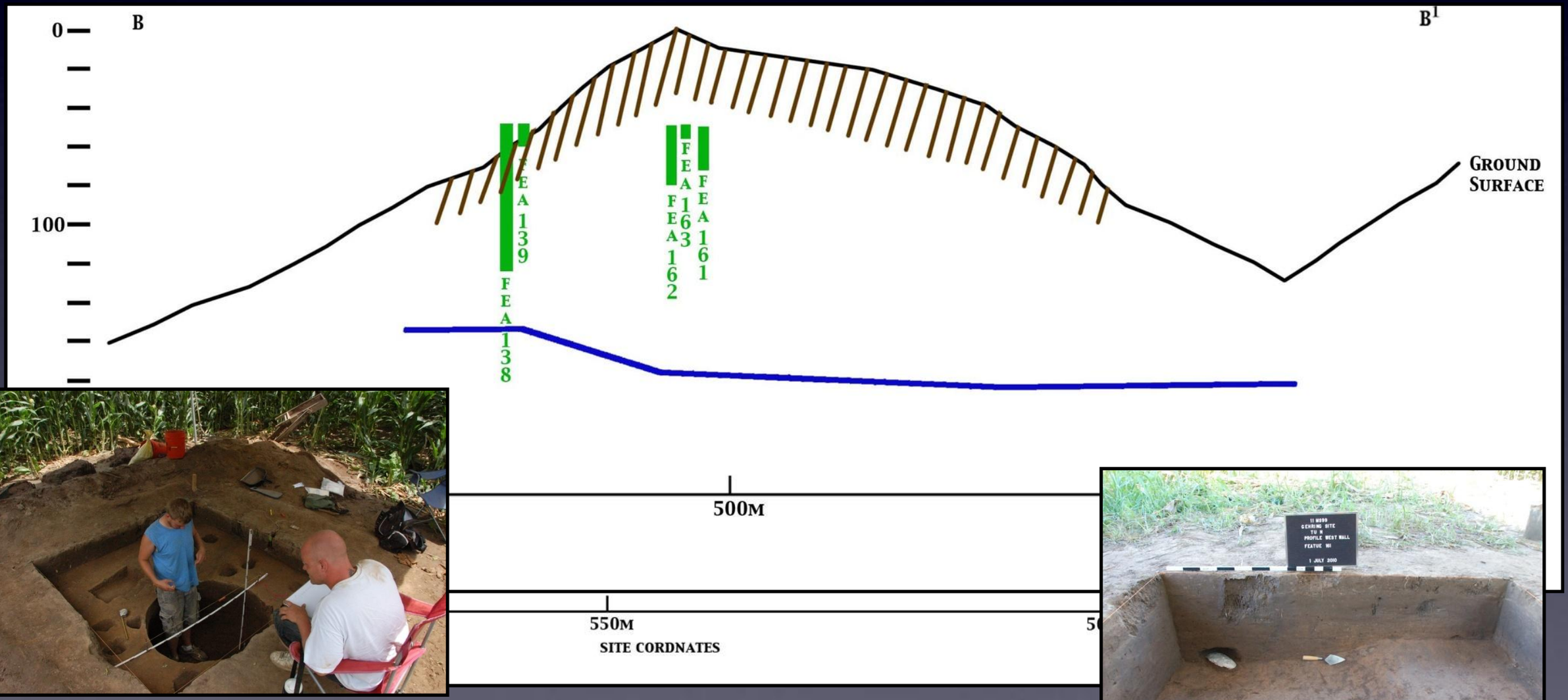
Middle Woodland: 100 B.C.

Feature Spatial Analysis



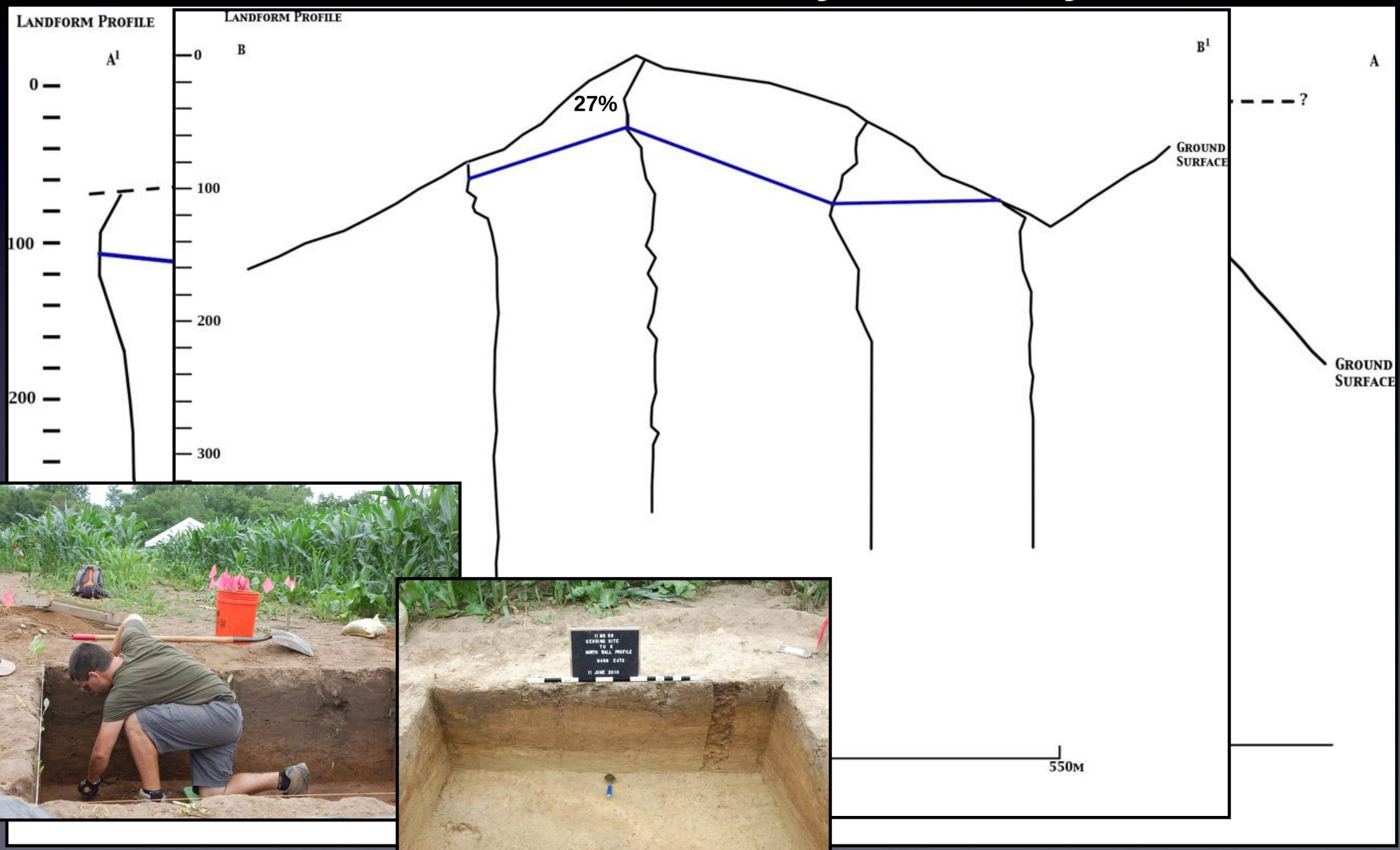
Emergent Mississippian: A.D. 1000

Feature Spatial Analysis

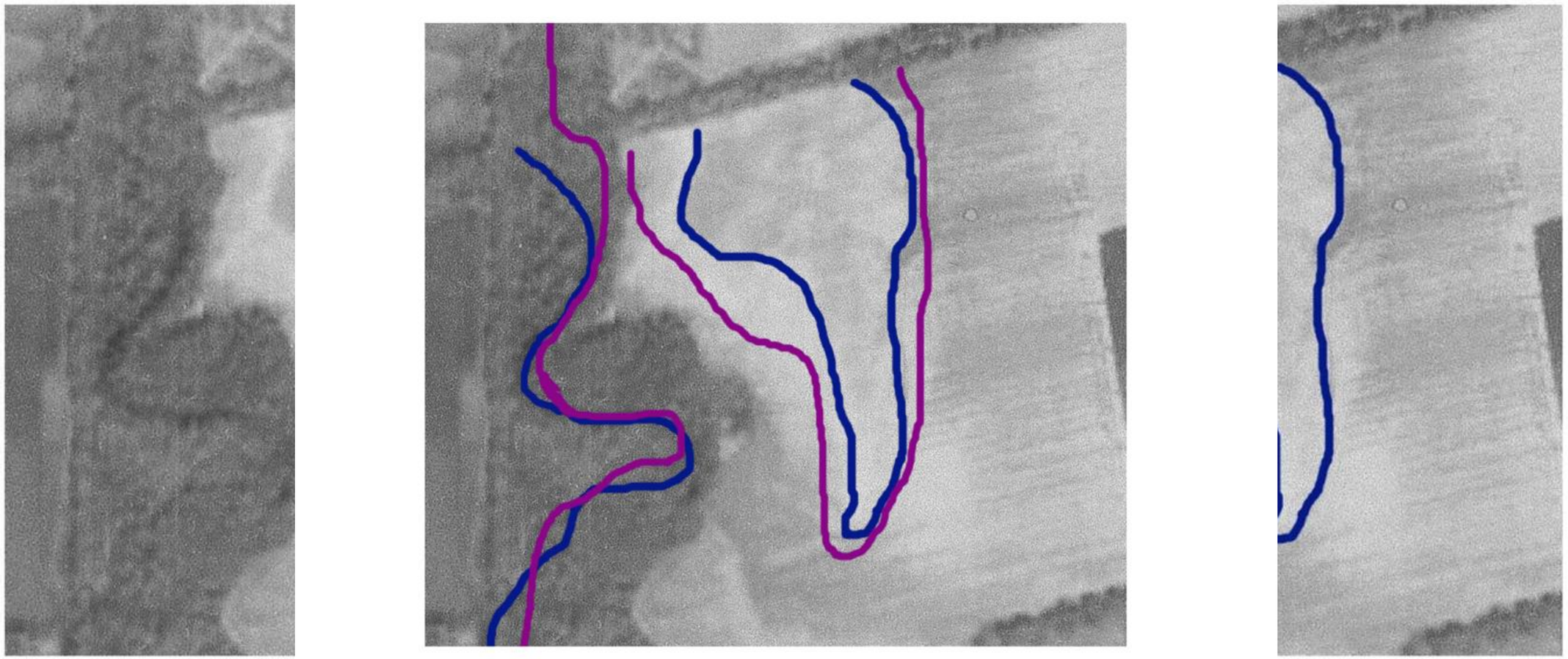


Historic: A.D. 1700

Particle Size Analysis: Clay



Historic: A.D. 1700
Aerial Photography



Results

- 10,000 years ago glacial flooding created the landform
- Ground surface 200 cm lower than current landform
- Edges of the site were starting to erode during Middle Woodland
- Emergent Mississippian, the western portion of the site is flat
- Historic landform suffered erosion but it is unclear how much