

ABSTRACT

THESIS: Investigating Anthrosols: The Search for Ritual Activity in the Middle Woodland Period

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This study investigates the use of geochemical and geophysical methods to determine ritual activity in a Middle Woodland Period context. The objectives were to locate areas of activity (ritual and domestic) that are not detectable by traditional methods, such as excavation, and to use these results to tease out possible ritualistic activities within the project area. Most Woodland ritual sites are virtually devoid of material remains. The use of phosphate testing and magnetic susceptibility can help tease out human activity patterns from the soil. Past human activities have deposited chemical (phosphate) and magnetic signatures within the soil through burning, organic deposition, and agriculture. Areas that lack these chemical signatures can indicate human pathways, structures, or spaces that may be interpreted as sacred. The patterning of phosphate and magnetic signatures reveal activity areas within these ritual sites. Soil phosphate and magnetic susceptibility levels were tested in and near the Moorehead Circle, a Hopewell culture ceremonial complex located within the Fort Ancient State Memorial (33WA2). The soil was collected from a field survey, and the phosphate and magnetic susceptibility analyses were completed in the Applied Anthropology Laboratories, Department of Anthropology, Ball State University. The results reveal new information about the activities that occurred within the Morehead Circle, including site construction and social activity patterns such as ritual preparation areas, organic deposits and potential pathways.