



Anthropological STEM Research Experiences at the Center for American Archeology



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Research Experiences as the CAA

The Center for American Archeology (CAA) pursues a mission of archaeological education, research, stewardship, and public service through the implementation of experiential programs that integrate education and research. These programs provide students with field and laboratory research experiences during formative years of their education, encouraging careers in archaeology and related STEM disciplines, as well as promoting scientific literacy. One such program is “Long-term Perspectives on Human-River Dynamics at the Confluence of the Illinois and Mississippi Rivers: Interdisciplinary Research for Students in Ecology and Archeology,” a National Science Foundation Research Experiences for Undergraduates (NSF-REU) site at the CAA that combines archaeological, paleoethnobotany, and ethnographic research experiences for students focused on human-plant interactions in the Lower Illinois Valley.



Geophysical Survey and Excavation at the German Site (11C377)

Students learned geophysical survey and excavation methods at the German site (11C377), a Late Woodland Jersey Bluff (ca 800-1300 cal CE) habitation site north of Crawford Creek at the McCully Heritage Project. They conducted magnetic, ground-penetrating radar, and electrical resistance tomography surveys across the site in order to detect subsurface anomalies and inform excavation strategy during the field season.

Excavation focused on magnetic anomalies detected during their surveys. Students excavated 1x2 m excavation units that revealed several Late Woodland pit features and a house basin. They also participated in laboratory work with German site material culture.



Paleoethnobotany and Botanical Experimentation

After their field experiences at the German site, REU students focused on paleoethnobotanical research through plant experiments with crops grown in our Eastern Agricultural Complex garden, field botany, workshops, flotation sample processing, and paleoethnobotanical analyses. These experiences focused on precolumbian peoples' and more recent peoples' relationships with plants in the Lower Illinois River Valley.



Ethnography in the Illinois Valley

REU students also investigated modern peoples' interactions with plants and the natural environment. In this component of the program, students learned appropriate methodology for ethnographic research, data collection, and analysis. Students met with local community members and conducted ethnographic fieldwork with residents of Calhoun County to address questions concerning peoples' relationships with farming, local history, and the environment.

Undergraduate Research

The final portion of the eight-week experience was the development and execution of original research projects, the results of which are proudly presented here. Students successfully investigated a wide range of anthropological problems. Preliminary results were initially presented in Kampsville to CAA field school students and staff. In this poster session, they present the final results of their projects in several outstanding posters that demonstrate the anthropological breadth of their experience and the program.

