Experimental Archaeology: Research Oriented Construction of a
Southwestern Adobe Pueblo Room

Asant Fritchman (University of Colorado) with Allen Denoyer (Archaeology Southwest)

Abstract

Archaeological simulation is a useful tool for improving our understanding of prehistoric technologies and testing archaeological interpretations. The "Hands On Archaeology" project at the 2014 University of Arizona Upper Gila Preservation Archaeology Field School focused on the experimental construction of an ancient adobe pueblo room in the style of the Cliff House (AZ 9-945,244). The project was done in cooperation with limited resources in terms of education, materials, and time. The experimental pueblos were built in a variety of different styles, with different methods of construction and in different settings around the Southwest to gain a deeper understanding of the origins of Southwest architecture.

Methods

Completing the adobe roof and roof hatch shaped woven baskets, each being 3.5 liters in Test to 3 destructive avenues for research and education adobe blobs, demonstrates the uniformity of conditions and constraints faced by 50 d scale model, migrants affected existing communities, social systems, and resources. Moreover, how did migrants y l b l  d l t t d f d l  d d  d t  d ill

Experimental adobe wall Rocker Diamond X Ranch

1/4 6. 40 cm wide by 20 cm deep  and directly below and Inferences
is a preservation archaeologist and ancient technology
Taphonomic
yp g
gp p p
1311
gy , g g
century arrival of e pe t t c aeo ogy Sout est
Meters
4.6
gyg p
Completing the adobe roof and roof hatch gp p p
pg g
gp
1311
gy , g g
south axis of the building, and rose ver All b ildi  t i l  i l di

Materials

Lime Sand Adobe

<table>
<thead>
<tr>
<th>Material</th>
<th>Lbs.</th>
<th>Cts. Minutes</th>
<th>Seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lime</td>
<td>1350</td>
<td>3.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Sand</td>
<td>2400</td>
<td>4.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Artificial soil was made by mixing the lime and sand and was placed in a basin for easy application. The mixture was then allowed to dry for 24 hours before being used in the construction. The artificial soil was used to simulate the properties of real soil and to test the effects of various soil conditions on the construction process.

Community Engagement

The experimental construction of a pueblo room adjacent to the field school's base of operations allowed the audience of students, professionals, and local communities to participate in the project. The pueblo was open to the public and allowed visitors to see the construction process and learn about the history of Southwest architecture. The pueblo was a valuable tool for representing our experimental project and demonstrating the architectural forms and construction methods of ancient peoples. It also provided a valuable educational experience for students and the general public.

Research Directions

Many new opportunities exist for future research involving the pueblo room project, such as:

- Comparing the adobe room and experimental pueblo room to traditional pueblo structures
- Evaluating the effects of different soil conditions on the construction process
- Investigating the effects of different construction methods on the finished product
- Exploring the role of adobe architecture in the history of Southwest communities

Acknowledgments

This project was sponsored by the University of Arizona's Center for Place-Based Education in Conservation, and the University's Office of Academic Innovation and Support, with an application for aid submitted to the University of Colorado.

The University of Arizona National Science Foundation (NSF) Award No. 1365559

"Hands On Archaeology" is a research project designed to explore the history of Southwest architecture and its impact on modern-day communities. The project is part of the University of Arizona's Center for Place-Based Education in Conservation, and is supported by the University of Arizona's Office of Academic Innovation and Support.

Archaeology Southwest