## Preservation Archaeology Field School at the Dinwiddie Site

## SUMMARY REPORT ON THE NATIONAL SCIENCE FOUNDATION RESEARCH EXPERIENCES FOR UNDERGRADUATES PROGRAM SITE, 2014-2015

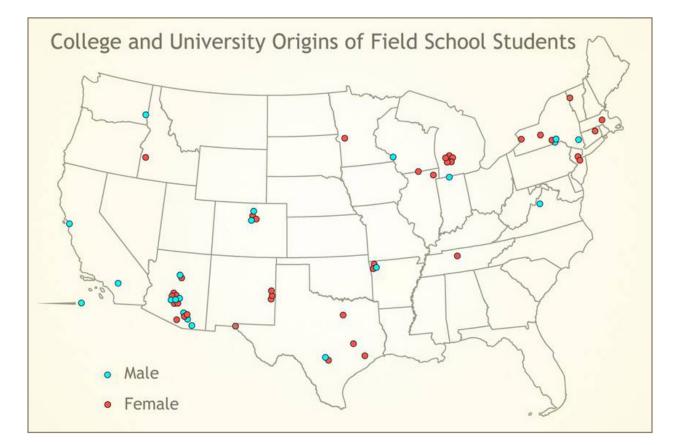


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*Twenty-three undergraduates* and five graduate students learned field and laboratory methods at the Upper Gila Preservation Archaeology Field School Research Experiences for Undergraduates (REU) site in rural southwestern New Mexico in 2014 and 2015. Eleven REU students were members of historically underrepresented groups in archaeology, and eight were from small or community colleges with limited STEM research opportunities. REU funding allowed these and other excelling undergraduates from colleges and universities nationwide to participate as active members of our research team (Figure 1). Students gained experience in archaeological survey, excavation, experimental archaeology, laboratory analysis, and communicating results to professional and public audiences.

Students worked with professionals from academic and Cultural Resource Management sectors to investigate the Dinwiddie site, a large adobe settlement dating to the 1300s. This investigation was part of Archaeology Southwest's long-term research on the Salado Phenomenon (A.D. 1200–1500) in the U.S. Southwest and the migrations, demographic reorganization, and community organization associated with it (Figure 2).



**Figure 1:** Colleges and universities of Archaeology Southwest–University of Arizona Preservation Archaeology Field School students, 2011–2015. MAP: CATHERINE GILMAN

Preservation Archaeology aims to minimize adverse impact to sites while maximizing research results through use of existing collections, surface survey, and targeted excavation in sites at risk for destruction or with existing disturbance. The Dinwiddie site was ideal for Preservation Archaeology because it had been heavily impacted by erosion, road construction, and vandalism, as well as the work of avocational archaeologists—whose notes and bulk artifact collections are gone—40 years prior. Our work revealed unexpected variability within the site and in comparison with contemporaneous Salado villages in the area.

Preservation Archaeology also seeks to engage local communities with research and results to help them understand local cultural resources and support preservation. Therefore, an important component of the field school was sharing results with public audiences as well as other archaeologists. All students coauthored excavation unit summaries for professional audiences, and 10 students presented posters related to their field school projects at professional meetings. Students also wrote blog posts about their experiences, which were read by 8,525 different





Figure 2: Students working together in the field and analyzing ceramics in the lab at our field camp.

viewers over the two years of the REU site. Outreach to local residents included an annual Archaeology Fair at the community center, site tours, a school event for grades K–6, and annual events at four area libraries. These enabled us to reach hundreds of residents (Figures 3 and 4). We created an Upper Gila archaeology "fact sheet" that has been widely circulated in the region and elsewhere.



The team's research contributes to an expanding understanding of migration and social cohesion during a period of crisis in the U.S. Southwest, in the centuries just before Europeans arrived. The late 1200s and 1300s were a time of great upheaval, as people fled social unrest in areas such

**Figure 3:** Field school student Marcy presenting her research project at our annual community Archaeology Fair in Gila, NM.

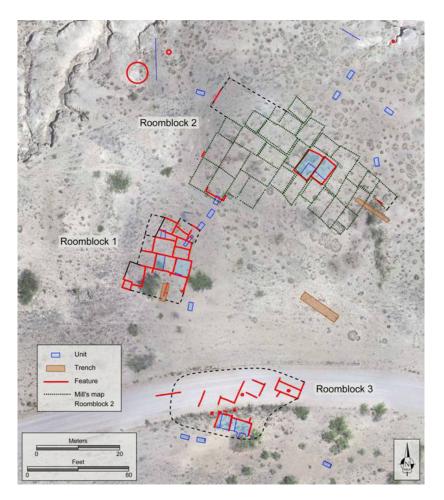


Figure 4: Field school staff share results of our work at a hands-on program for children at the Silver City Library, NM.

as the Four Corners and ultimately settled in other regions. In their new homes, migrants had to negotiate with established residents. Some newcomers settled in enclaves at the edges of existing communities, where spatial separation and dissimilar pottery and other household items marked them as different. Over time, ideas from the migrants' former homelands blended with established local traditions—and with symbolism linked to regions farther south—to form a new ideology, which researchers have labeled "Salado."

Archaeologists see Salado ideology expressed in iconography on polychrome ceramics. This shared set of ideas allowed communities of people with different geographic origins and ethnic backgrounds to live together without obvious differences in wealth or status—at least not in their houses, household goods, and health.

An interesting result of our work at Dinwiddie is a lack of strong evidence for a substantial migrant community, though we expected to find one. Previously excavated Salado sites in



**Figure 5:** Map of 2013–2015 excavation units/trenches and identified features at the Dinwiddie site juxtaposed with the geo-referenced 1972 excavation map of avocationalists Jack and Vera Mills. MAP: CATHERINE GILMAN AND MICHAEL BRACK

the Upper Gila area and elsewhere showed that people of a northern tradition known to archaeologists as "Kayenta" established many enclaves in the late 1200s, just before widespread production and use of Salado polychrome pottery in the 1300s. Evidence from Dinwiddie highlights variability in the role of Kayenta migrants in establishing Salado communities in this region.

Another significant finding was unexpected variability in pottery and architecture. The settlement comprised three blocks of rooms, each with different characteristics (Figures 5 and 6). Several excavated rooms showed abundant evidence of remodeling over a long time span, including floor replastering and wall strengthening, as

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well as episodes in which residents deconstructed rooms and moved walls to other locations. Some rooms contained a high proportion of broken El Paso Polychrome pottery, which is linked to other culture areas to the southeast. Other areas of the site revealed far less of this pottery, but did include some pottery linked to the Mesa Verde region.

These patterns are surprising, because previous research has characterized Salado residency in southwestern New Mexico as short-lived, and without substantial variation within villages. Ceramic and architectural variability at the Dinwiddie site highlights the variability in Salado villages and in the social processes that helped residents form cohesive communities in an ethnically diverse landscape.



Figure 6: Artist's reconstruction of the Dinwiddie site in the 1300s (by Robert B. Ciaccio).

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