## Archaeology Southwest / University of Arizona Preservation Archaeology Field School Student outreach projects presented at the Gila Library and Community Center, June 27, 2015

# Alexander Ballesteros (Northern Arizona University) and Dushyant Naresh (Vassar College, NY) We made a ground stone comal and cooked tortillas on it in order to understand how cookware was produced and used in the past. We also examined archaeological ground stone and other artifacts from

the Dinwiddie site with implications for understanding migration patterns, social identity, and cultural coalescence. This project demonstrates some of the issues inherent in categorizing groups of people in the past, and approaches to navigating these challenges with the archaeological record.



# Victoria Bowler (University of Texas El Paso)

My project concerned screen size comparisons for excavation. Data can be distorted if artifacts small enough to fall through a  $\frac{1}{4}$ " screen aren't collected. I made clay beads using a technique (possibly used in the past) of wrapping clay around grass stalks. I mixed the beads with soil and helped kids search for them in a window screen (1/16").



*Alexandra Flores (Beloit College, WI) and Devinne Fackelman (Grand Valley State University, MI)* We studied the bone tools found at the Dinwiddie site during the 2015 field season and compared them with bone tools from other Cliff phase sites nearby. Our findings this year included two bone awls, a bone hairpin, and three tools of unknown function.



### Joe Hall (Cochise College, AZ)

I demonstrated atlatls and helped visitors learn to use them to throw darts at a target. I also discussed the research we conducted while creating our own atlatls using stone tools during the field school's experimental archaeology sessions.



#### Alexandra Norwood (Arizona State University)

I made experimental paint by boiling black walnuts in water until the liquid reduced into a usable consistency. I then painted a bowl and some experimental tiles with the paint and various combinations of clay slips, and fired them. After firing, the black walnut paint had visual characteristics more commonly associated with mineral paint rather than those typical of carbon paint. Use of a similar paint may be an explanation for the "mineral-looking" nature of much of the carbon painted Salado polychrome pottery from the Dinwiddie site.



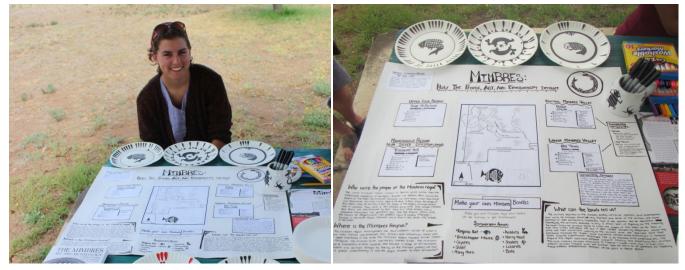
# Marcy Pablo (Tohono O'odham Community College)

My project examined traditional basketry using natural materials and ancient methods. Yucca and beargrass were important materials but not common in all areas, so many people would have had to travel or trade to acquire raw materials. I also wove a small basket using these materials without modern techniques. I used stone flakes to shred fibers and a bone awl for weaving, which was much more time-consuming than using modern metal tools.



### Anna Porter (State University of New York at Buffalo)

I examined animal imagery on Mimbres Black-on-white bowls. The animal images combine realism and abstraction; some animals can be identified, while others are unidentifiable or combine attributes of multiple species. Archaeological sites in the Mimbres Valley vary in the frequencies with which different types of animals are shown in assemblages of painted bowls. Examining the ways these bowls depict combinations of animals contributes to a greater understanding of how Mimbres potters viewed and interacted with their environment.



### Lindsay Shepard (Arizona State University)

I used the digital imaging program DStretch to enhance photographs of pottery sherds from the Dinwiddie site. I tested painted and burned painted sherds, as well as a few with fingerprints and striations, in order to examine which types of markings most benefitted from DStretch enhancement for analysis.



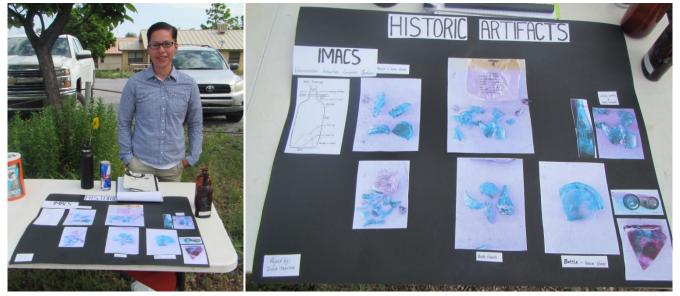
#### Alisha Stalley (Northern Arizona University)

I tested expanding spray insulation foam as a way of protecting tree-ring samples for transport from the field to the laboratory. Tree-ring samples need to be kept intact in order for analysts to examine the distinctive patterns of rings used for climate reconstruction and dating, but under field conditions many samples lose their important outer rings or fall apart altogether. I wrapped samples in different materials before enclosing them in an empty cardboard can filled with expanding foam, and then let guests kick the can vigorously during the outreach fair. All of the samples survived the abuse without falling apart.



#### Diana Trevizo (Eastern New Mexico University)

My project concerned the historic artifacts left behind by pot-hunters decades ago at the Dinwiddie site and found in disturbed areas during our 2015 excavations. I used characteristics of the glass and other materials to pinpoint when this pot-hunting took place. Using a combination of reference materials, I was able to date the time frame when the glass was manufactured to a 20-year period (1910-1930), which helps us to determine the dates for this historic disturbance at the site.



#### Monica Veale (University of Texas at Arlington)

I summarized the ceramics data from the 2015 field season to examine the types of ceramics present at the Dinwiddie site. I also brought clay to demonstrate how pottery was made using the coil and scrape method.



# Connor Walsh (University of Notre Dame, IN)

I designed and built a range of wooden bullroarers based on both traditional and experimental designs. I then measured the tone and volume of their voices to examine which patterns and materials produced the loudest or most variable roars. I learned that denser woods produce louder tones, and that irregular or serrated bullroarer designs (which were more difficult to use) generate a broader range of infrasonic tones associated with states of altered consciousness, which may explain their prevalence in ritual contexts.



Thank you to the Gila Library and Community Center for their help and support in organizing the Archaeology Fair; to the owners and employees of the Rocker Diamond X Ranch, our wonderful hosts in Mule Creek; to the owner of the Dinwiddie Site for his support of our work there; and to the students and staff of the 2015 Preservation Archaeology Field School for their hard work.

