Archaeology Southwest / University of Arizona Preservation Archaeology Field School

# Student Outreach Projects Presented at the Archaeology Fair



#### GILA RIVER FARM, GILA, NM JUNE 25, 2016

## Daniel Agudelo

UNIVERSITY OF MICHIGAN

My project was based on archaeological ethics and how to run a successful archaeological field project. These two concepts were presented by making visitors players in a board game with a layout based on Mimbres Black-on-white pottery designs and replicas of prehispanic bone dice. Players rolled the dice to move around the board, and then were asked questions based on site ethics and running an archaeological project.



### Jonathan Alperstein vassar college, NY & Conner Awayda UNIVERSITY OF BUFFALO, NY

We constructed a scale model of an adobe room in the style of the Cliff phase (AD 1300-1450+). We experimented with different combinations of clay, sand, and straw to prevent the adobe from cracking as it dried. Our replica structure incorporated construction details used in the Cliff phase, including cimiento stone foundations, adobe walls, and a roof made of wooden vigas, bark, and adobe.



## Peter Babala

SANTA ROSA JUNIOR COLLEGE, CA

My project concerned the effect of core preparation on stone flake size and tool-making potential. I asked archaeologist Allen Denoyer to reduce four comparably-sized cores, two rhyolite and two obsidian. I measured the resulting flakes and rated them based on their potential for making tools. Flakes were rated on a scale of 1-4, with 1 being the best. Two of the cores (one of each material type) were prepared with the intention of producing flakes that



could either be used without farther working or reworked into tools, and two cores were reduced without any advance preparation. I concluded that intentionally shaped cores make better use of raw material.



### Carolyn Barton UNIVERSITY OF SOUTH FLORIDA

My project focused on a comparison between kill holes in ceramics and those in metates. I examined where, when, and how kill holes were made in these items. I also tried to understand the symbolism behind them in order to link this material culture with past people's ideas.

## Lexie Bennicas

UNIVERSITY OF HAWAII MANOA

The purpose of my project was to help people understand how much we can learn from diagnostic artifacts when they remain in context on archaeological sites. My intention was to help encourage people to leave artifacts where they are found and not remove them from sites. In an area so filled with archaeological sites, this type of education is particularly important.



## Kaitlyn Cometa

UNIVERSITY OF DELAWARE

I performed an experiment testing Antelope Creek obsidian to see whether one can observe the difference between poor quality and good quality obsidian based on the appearance of the cortex. My hypothesis was supported: the obsidian with matte brown cortex was of good quality for flaking, and the shiny black nodules did not produce good-quality flakes and would often explode when knapped.





# Patrick Depret-Guillaume

One of the most interesting artifacts we recovered this field season was a ground stone mano with a hole pecked into it. Ground stone specialist Jenny Adams speculated that it may have been used as a lamp. To test this idea, I made two similar artifacts out of soft volcanic tuff. I used lard as fuel (as an analog for deer or bear fat). For the wick, I substituted industrial hemp fiber for yucca. Although the lamps worked, I concluded that the artifact was probably not used for illumination based on morphological attributes like the depth of the basin.

### Lara Fields bryn mawr college, pa

My project tested the consistency and durability of three different pigment recipes for pictograph paint. I compared the efficacy of water, corn oil, and lard for binding the paints, and created a brush using a yucca leaf. I then painted three pictographs on sandstone slabs, each with a separate recipe, and compared the color and residue of the images after three days. This project taught me that even the simplest products can last a lifetime.





### Katie Jacobson UNIVERSITY OF CALIFORNIA SANTA CRUZ

I wove a pair of sandals out of yucca that resembled prehispanic examples. It took several unsuccessful attempts, but I eventually was able to make them. I also presented research on ancient footwear based on archaeological examples and ethnographic accounts. Items that don't preserve except under exceptional circumstances can still be great sources of information on the past.

### Alyssa Kyper EASTERN NEW MEXICO UNIVERSITY

For my project, I ground teeth into an elk scapula to replicate an uncommon artifact occasionally found in Early Agricultural Period archaeological sites. I experimented with different materials for grinding to make the tool, and had the most success with sandstone. To test the idea that these artifacts may have been used as seed combs, I ran my replica through local flora to see whether it removed seeds from plant stalks. This action produced wear similar to that seen on archaeological examples.



## Emily Marturano UNIVERSITY OF PITTSBURGH & Lindsay Romo COCHISE COLLEGE, AZ

The great kiva at the archaeological site of Ormand Village was excavated in 1965-66, and was unusual

in having four walls all constructed differently. There was no evidence of a roof or a central post hole, and the structure was emptied before being abandoned. We chose to research this structure because it was from the same time period and general location as the site where we excavated this year. Our project presented information on the great kiva and a model of the structure.



## Elissa McDavid

HENDRIX COLLEGE, AR

My project was about how people in the past symbolized rain, and how current people still do this as well. I presented research regarding Southwestern monsoon patterns and their importance today and in the past. I also showed examples of ancient rain symbols, and asked people to write down ways they hoped for or celebrated rain.





### Adam Sezate U.S. NAVAL ACADEMY, MD

My project focused on replicating the manufacturing process of prehispanic stone pipes. I used flaked stone drill bits to peck and bore out the tobacco chamber and mortice, and used sandstone to shape the exterior of the pipe. My goal was to be able to produce smoke "clouds," which are still used in Native American religion today.

# Thank you!

We thank Martha Cooper and the Nature Conservancy for their support during the Archaeology Fair and throughout our 2016 field season; the Davises, our wonderful hosts in Cliff; our friends and neighbors in the Cliff/Gila area; and the students and staff of the 2016 Preservation Archeology Field School for their hard work.