Understanding Site Formation Processes:  
The Construction and Burning of a Jacal

Several recent archaeological excavations along the San Antonio River have uncovered features consisting of burned clay. The features range from 3500 to 5800 years B.P. in age. Many pieces of burned clay found in these features retain impressions of sticks and poles oriented in intersecting directions. A number of natural and anthropogenic processes may create such burned clay features including forest fires and thermal cooking features. In addition, some clay features are also suggestive of jacal-type habitation structures. There are many variants of jacal construction but in general they consist of walls made of a wooden fabric of vertical poles held together by horizontal sticks (wattle) and encased in a clay, sand and straw mixture (daub).

To begin to understand what the prehistoric burned clay features may represent, the staff of the Center for Archaeological Research has undertaken the construction of a 2 x 2 meter jacal structure on San Antonio Missions National Historical Park property. Several undergraduate and graduate students have taken part in the construction under the direction of Dr. Steve A. Tomka. Now that the structure is completed, the next step will be to set it on fire and subsequently carefully study the archaeological signature generated in the process.