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PRESENTATION ABSTRACTS

Yucca Quids with Tobacco Contents: A Case Study from Antelope Cave in Far Northwestern Arizona

Karen Adams

Unburned quids with tobacco (*Nicotiana*) flowering parts tucked inside them were recovered within Antelope Cave in the Arizona Strip country. Although groups from the Archaic through the historic periods visited this cave, the heaviest use was by the Virgin Anasazi (A.D. 1-1000), based on material culture remains and radiocarbon dates. Quids are wads of fiber twisted into a ball for insertion in the mouth, and are sometimes interpreted as food, especially when they are flattened, matted (apparently with saliva) and display human teeth marks. Twenty-seven of thirty quids examined contained wild tobacco flowering parts (capsule, calyx, seed, leaf, pedicel, main stem) inside, suggesting the quids were not a source of food. The fibers were identified as coming from *Yucca* plants, based on 6-7 base pairs near the trnL region of chloroplastic DNA. The inclusion of tobacco and diverse recovery contexts suggest the groups visiting Antelope Cave used them as a personal stimulant, or possibly as a medicinal treatment of intestinal parasites.

Size Matters: Obsidian Procurement and Use in the Upper Queen Creek Basin

Jesse Ballenger

Statistical Research, Inc. recovered a total of 727 obsidian artifacts during the U.S. 60 Queen Valley to Queen Creek project. The proximity of the Superior source to prehistoric period sites provides an opportunity to explore the role of obsidian in Hohokam lithic technologies, settlement, and exchange. Relying on an experimental sample of more than 1,600 marekanites ("Apache tears") collected directly from the Superior obsidian source, this paper explores obsidian procurement and reduction technology within the broader context of mobility and exchange during the forager to farmer transition. Variability in the consumption and treatment of obsidian nodules of various sizes demonstrates that pre-Classic period groups in the area practiced the first regular use of the resource and had direct access to the Superior source; the Late Archaic/Early Agricultural period and Red Mountain phase sample of nearly 1,800 flaked stone artifacts included only 7 pieces of obsidian. Obsidian consumption increased dramatically during the Classic period, but variability in nodule size and reductive technology indicates a change in the obsidian economy. These findings are interpreted in light of competing models of obsidian circulation in the Hohokam area.

Rock Art Conservation on the Gila River Indian Community

Ashley Bitowf, Teresa Rodrigues, Michael Withrow, Carla Virginia Samano, and Emery F. Manuel

This paper summarizes recent rock art conservation efforts that have been undertaken by investigators from the Gila River Indian Community Cultural Resource Management Program. In addition to the

detailed documentation of petroglyph panels, part of these conservation efforts include the use of graffiti removal products at rock art sites within the Community. Sprayed and brushed paints are one of the primary threats to prehistoric and historic art in the GRIC, and the presence of graffiti encourages others to also damage sensitive and sacred sites. The products that were employed to remove graffiti, the techniques utilized, and the lessons learned are described in this presentation.

Corn, Cotton, Cloth, and Ceramics from the Dyck Cliff Dwelling: A Sinagua Ceremonial Connection

Todd Bostwick

Systematic excavations from 1962 to 1972 of a Sinagua cliff dwelling located on private property northwest of Montezuma Castle National Monument yielded a remarkable collection of perishable materials including macrobotanical specimens, wooden tools, and textiles. This paper describes the previously unanalyzed corn cobs and kernels, cotton seeds and raw cotton, weaving tools, and textiles that were found in rooms, storage cysts, and middens dating circa AD 1100-1300. Discussion of the textiles focuses on rare examples of tie-dyed cloth that contain designs incorporating corn symbols, and presents a cross-media comparison with ceramic designs at the site that represent the same ceremonial symbols.

Paḍ 'Aangam: Interpreting Landscape and Ethnohistory in the O'odham Story of Creation

Andy Darling and Harry J. Winters, Jr.

Paḍ 'Aangam was the human embodiment of Hawk Man, a unique culture hero for the O'odham communities of southern Arizona. Celebrated in the stories of Creation, his life offers a bridge between protohistory and history that engages ethnohistorical themes of Hohokam and O'odham continuity, the founding of the Tohono O'odham village of Anegam, and historical practices of warfare and purification. Multiple versions of the Paḍ 'Aangam story were received from O'odham informants in the early twentieth century by Juan Dolores, Ruth Benedict, Frank Russell, Frances Densmore, J. William Lloyd and Julian Hayden during the heyday of Akimel (Pima) and Tohono (Papago) O'odham ethnography. This paper offers a comparison of primary sources with specific references to place names and ethnogeography. It explores the richness of this often ignored account from the perspective of time, historical revision, geography and song. In particular, references to warfare and counter-raiding with the Apache, identified as *'Oob* or *Ohb*, also may be interpreted as "any hostile tribesman". In the Paḍ 'Aangam story, we propose that *'Oob* refers to the Yavapai and the initiation of hostilities with them in the northeastern frontier of O'odham territory, after the historical destruction of the Hohokam Great Houses and prior to the arrival of the Apache in significant numbers. Our discussion does not seek to resolve existing debates regarding O'odham origins based on a reinterpretation of the stories of Creation. Instead, we acknowledge those elements of the story that allow for descent from ancient ancestors, inter-marriage, and the adoption of enemies and captives. New insights emerge for understanding O'odham Creation in terms of land and space (and their relationship to O'odham history, conceived as cycles of events occurring at places), violent acts, and the increasing importance of revitalizing historical memory for the perpetuation of cultural and landscape heritage.

Archaeological Site Naming Conventions: Employing Professional Standards. Panel Discussion moderated by Glenn P. Darrington, with Todd Pitezal, Mary-Ellen Walsh, Angela Garcia-Lewis, Deil Lundin, and Chris Loendorf

For decades the assignment of a name to a newly discovered archaeological site has been left to the discretion of the archaeologists who initially found and recorded it. Overtime this has resulted in some sites being given names that are irreverent, derogatory, disrespectful, and insulting to Native Americans and the public. When research associated with these sites is published it reflects poorly on the profession of archaeology. This panel discussion ask the question “Do archaeological sites need a name at all?” and if so what basic standards can be applied when assigning a name or designation to an archaeological site that will be professionally appropriate and inoffensive.

Life Between Two Rivers: A Study of the Sedentary to Early Classic Transition on the Queen Creek Delta, Arizona

Andrea Gregory and Alanna Ossa

Disruption of exchange networks and settlement patterns during the late Sedentary to early Classic period transition has been well documented along the middle Gila River Valley. Previous research has suggested a trend in population relocation from downstream Gila River sites such as Snaketown in favor of sites upstream such as the Grewe-Casa Grande complex during this time. Based on evidence recovered from residential contexts identified during the PVR FRS project, outlying areas situated along the Queen Creek delta and bajada show a continued occupation well into the Classic period, maintaining contact with middle Gila River communities throughout this transitional period. The PVR FRS project findings bridge the Sedentary and Classic occupation, offering a unique opportunity to analyze both continuity and fluctuations in exchange networks between the Hohokam settlements in Queen Creek and communities in the middle Gila River and lower Salt Rivers during this time. The settlements identified from the PVR FRS project also show increasing involvement with ceramic production and potentially botanical resources into the early Classic period, supporting their importance in helping us understand the circumstances of increasingly localized production identified during that era.

Masking Social Differentiation, A pre-Classic Hohokam Example from La Villa

Michael Lindeman

Desert Archaeology has recently completed two excavations projects at the site of La Villa in downtown Phoenix which provide unique linear sections across the site extending from the core to the margins. The current paper examines social differences among the inhabitants of La Villa based on proximity to the plazas at the site. Settlement close to the plazas would have been comprised largely of the village founders and their decedents (Craig 2001; Wallace 2003; Wilcox et al. 1981). Such a location would have clearly displayed the historical relationship of the households to the founding of the village and the social, political, and economic rights derived from first-comer status (Wallace 2003). In contrast, occupants further removed from the plazas may not have had the historical advantages provided by founder status. At La Villa, social groups close to the plazas were able to maintain continuity over multiple generations, in some cases, from the founding of the village until its abandonment; those further removed from the plazas do not display such longevity. The differential ability of social groups to thrive over hundreds of years points to some degree of inequity. However, those differences are only

minimally reflected in the material culture that can be used to display social standing, such as decorated ceramics and other types of socially valued goods. This suggests that social differences among the pre-Classic Hohokam are masked and minimized in an effort to promote social harmony.

Fracture Toughness and Flaked-Stone Raw Material “Quality”

Chris Loendorf, Brian Huttick, Thatcher Rogers

This paper describes the results of carefully controlled experiments that were designed to test the performance of flaked-stone projectile points made from six different types of raw materials. Archaeologists have proposed a number of different ways to assess flaked-stone raw material “quality”, but these measures are largely subjective and they have proven difficult to quantify. This issue is not merely semantic, and instead it affects assumptions and interpretations that analysts make regarding raw material acquisition patterns. We propose here that fracture toughness is a primary determinant of raw material performance, and we also describe a method to objectively quantify this variable. Further, material “quality” itself is a subjective matter, and modern flint knappers have tended to rank low fracture toughness stones such as obsidian as the best materials. However, the “quality” of a stone in terms of tool performance is largely dependent on the use of the artifact, and we show here the low fracture toughness stones such as obsidian are poorly suited for applications such as penetrating rawhide armor. In particular, low fracture toughness stones have very poor durability, and the fact that obsidian was widely employed to produce projectile points indicates that high durability was not an important factor in the choice of projectile point raw materials.

Assessing Data Potential of Smaller, Dispersed Activity Loci, with a Focus on Early Agricultural Occupation in the Eastern Papaguería

Deil Lundin

Desolate and unforgiving, the Eastern Papaguerían landscape was hardly a draw for early archaeologists. With the exception of Ventana Cave, which was inhabited during the Paleoindian through Historic periods, of primary focus during the initial wave of research were highly visible Classic Period villages such as Gu Achi, Jackrabbit Ruin, and Valshni Village. As was true in other regions, these pioneering studies sought to resolve fundamental questions about cultural affiliation and chronology. However, the dearth of diagnostic artifacts made cultural and temporal assignments tenuous at best. Recent work along State Route 86 on the Tohono O'odham Nation has uncovered several occupational loci dating from the Archaic through Protohistoric periods. Results of AZTEC's investigations support short term, likely seasonal, and possibly repeated occupation, particularly during the critical Early Agricultural period, by smaller groups that performed complex mortuary practices and pursued a mixed strategy of maize cultivation and exploitation of locally available wild resources. It is evident from our investigations that smaller, less intensively occupied sites with relatively unimpressive surface expressions can still yield significant data that do and will continue to contribute to a better understanding of occupation in the Eastern Papaguería. Moreover, these investigations underscore the need for additional research outside the right-of-way corridor to determine what role these smaller populations served within the larger settlement system and within long term, regional level changes associated with the adoption of agriculture.

Granary Pedestals at the Classic Period Lower Santan Platform Mound Village

Brian Medchill and M. Kyle Woodson

Recent excavations at the Lower Santan Platform Mound within the Gila River Indian Community identified at least three adobe and rock lined pedestals for what appear to be above ground storage features that have previously been called “granaries”. Despite extensive previous excavations at the site, which include the identification of over 1500 features, similar granary pedestals have not been found, nor have they been reported elsewhere within the Community. These features are common in other regions such as the Tonto Basin, and one possibility is that this unique architectural form was introduced to the Community by immigrants from elsewhere. This paper considers this possibility based in part on an analysis of the nature and distribution of these distinctive features.

The Archaeology of the Borderlands Area: Sites along Lone Butte Wash, within the Gila River Indian Community

Scott Plumlee

Recent development of Gila River Indian Community lands has resulted in the identification and investigation of numerous sites located along the Lone Butte Wash. This work has been completed by the Cultural Resource Management Program of the Community. Lone Butte Wash is the western extent of Queen Creek, which extends eastward from its confluence with the Gila River for approximately 22 kilometers. GRIC-CRMP investigations of sites along this drainage have revealed a long history of resource exploitation, probably related to the extensive mesquite bosques which once covered the area. Currently, the first evidence for this exploitation dates to the Middle Archaic period. Later Hohokam and Historic period components are also represented.

The Occupational History of Gila Crossing Village on the Gila River Indian Community

Teresa Rodrigues

Gila Crossing, which gets its name from the location of a ford across the Gila River, has been a focal point for human habitation from the Archaic Period through the present. The site is located at the western end of Queen Creek, at its confluence with the Gila River. The Gila Crossing site was a large village with a ballcourt during the pre-classic. Habitation continued through the Classic period, unlike many pre-classic sites on the north bank of the Gila River. This paper briefly discusses the results of over 20 years of cultural resource investigations that have been undertaken by the Gila River Indian Community Cultural Resource Management Program in conjunction with housing developments and other infrastructure improvements that have been completed at Gila Crossing. This work has substantially improved our understanding of the site and its relationship with other sites along the Gila and those along Queen Creek.

Top of the World to Gila Crossing: Queen Creek, our Missing River

Hoski Schaafsma with contributions by Linda L. Countryman

Queen Creek runs east to west through the central Phoenix Basin, providing a riverine corridor from the basin to the Globe Highlands. Prehistoric settlements, including Hohokam and Salado villages have been

documented from this drainage. The archaeological record includes Archaic, early agricultural, early Hohokam to some of the latest documented Hohokam sites dated. In the area of the Queen Creek Delta some of the largest Hohokam sites have been recorded, suggesting a major population and cultural node existed on the delta. Recent work has begun to shed light on the significance of Queen Creek in the Hohokam world, we present an overview of Queen Creek and its cultural significance to the Phoenix Basin.

Time to Go!: A Quick Look at the Prehistoric Settlement History of the Trans-Whitlow Queen Creek Watershed

J. Scott Wood

Preliminary assessment of several hundred archaeological sites inventoried on the Tonto National Forest within the upper Queen Creek and upper Pinto Creek watersheds suggests several broad patterns of population movement over time. Upper Queen Creek appears to have been settled early in the Hohokam sequence with an added push from the Delta during Sacaton phase. However, the area appears to have been virtually abandoned during the Early Classic Period. When new settlements started up again in the Late Classic Period, they appear not to be related to the Hohokam of the Delta but may reflect an expansion of the Salado of the Globe Highlands related to the rise of the major settlement of Togetzoge.