

NOTES ON A PROPOSED LONG-TERM, INTERDISCIPLINARY SAFFORD BASIN RESEARCH PROGRAM

Patrick D. Lyons, Ph.D., RPA
Director
Arizona State Museum
University of Arizona

22 November 2016

After the retirements of Drs. Paul and Suzanne Fish, who directed a research program focused on the Hohokam of the Tucson Basin for 35 years and given the upcoming retirement of Dr. E. Charles Adams, who directed a research program focused on the ancestral Hopi villages of Homol'ovi and the surrounding area for 30 years, the Arizona State Museum (ASM) must develop a new long-term field project. The Safford Basin presents a number of advantages as a location for a sustained research effort:

- proximity to Tucson (University of Arizona)
- the opportunity to build on the long-term research program of James Neely and his former students and colleagues, as well as Anna Neuzil and others
- strong potential local partners: Eastern Arizona College (EAC), Discovery Park, USFS, BLM, avocational archaeologists
- existing, unanalyzed and unpublished, high-quality collections at EAC (Betty Lee and Wes Jernigan materials; parts of the Mills collection)
- unanalyzed and unpublished collections being donated to ASM (Ray Robinson collection)
- the Goat Hill Site collections (now at UT) are coming to ASM for permanent curation
- ADOT is planning to revamp US 70 again in the very near future
- current ASM researchers have long focused on ancient migrations and the role that Kayenta immigrants played in the Salado phenomenon, as well as the ancient use of ceramics in communicating social identity

The Big Picture

ASM is envisioning an interdisciplinary project focused on human-environment interaction and socioeconomic and political dynamics in the Safford Basin. The core of the project would be anthropological archaeology. Additional components would include but not be limited to:

- sociocultural anthropology/linguistic anthropology (perhaps a focus on tribal place names and land use)
- history and ethnohistory (focus on tribes, the Mormon community, the military, CCC, SCS, NRCS, etc.)
- pedology (better understanding of fields and human impact on the landscape)
- hydrology (modeling of the function and other studies of the canal systems)
- palynology and macrobotanical analyses (reconstruction of ancient plant communities, climate, human economic activity, and human impact on the environment)
- dendrochronological modeling of ancient precipitation in the Pinaleños

Archaeological Questions

- What was the nature of the settlement pattern and population in the uplands and in the floodplain?
 - What might be left in terms of parts of habitation sites in the floodplain? The Safford Basin should have had a huge floodplain population, second only to the Phoenix Basin.

- What habitation sites existed/might remain on the north side of the Gila? Neely indicates this is a long shot but suggests a review of Don Tuohy's 1960 survey manuscript at ASM.
- Who was living where (and when)? We have pretty good assumptions (mostly immigrants in the uplands and mostly locals in the floodplain), but could do more in this area. Anna Neuzil's work suggests a late blending of groups and the movement of immigrants/their descendants down into existing floodplain communities.
- How and when did the upland settlement pattern develop?
- How and when did the upland systems of canals and fields develop, and who built them? Again, we have pretty solid ideas based on Neely's work, but more work could be done to shore up the chronology and to evaluate the connection between immigrants and the canal and field systems.
 - Lex Lindsay's work in the Upper Desha Community near Navajo Mountain, Utah seems to have resulted in documentation of Kayenta features similar to those documented by Neely.
- What was the nature of the interaction between groups in the floodplain and the uplands?
 - Neuzil's work gives us a good foundation to explore this question, but much more could be done.

Archaeological Tasks

- Work with existing collections (artifacts and/or records):
 - EAC (Lee, Jernigan, Mills, Rule): Owens-Colvin Site, Spear Ranch/Krider Kiva Site, Fischer Site
 - ASM (Dewey Flat Pueblo/Gila Bank Ruin; Ray Robinson collections; Tuohy's survey collections, etc.)
 - NMNH (Pueblo Viejo/Curtis/Solomonsville)
 - University of Colorado (Pueblo Viejo/Curtis/Solomonsville)
 - USFS (Marijilda Site)
 - Local historical societies
 - Locate private collections used by Jeff Brown in his dissertation research
 - Amerind Foundation
 - BLM?
 - Goat Hill collections coming to ASM
 - CCC/SCS/NRCS (follow up leads from Greg Seymour's work, etc.)
- Fully document new sites.
- Complete 100% survey of areas around upland canals, focusing on discovery and recording of habitation sites.
- Test habitation sites.
- Rescue samples from threatened sites (erosion, pothunting, etc.).
- Test canals and fields.
- Test features associated with canals (processing sites?).
- Research origins of upland canals: examine data from the Kayenta Region and the Upper Little Colorado Valley (stone-lined canals, etc.).

Potential Partners

- Karen Adams
- Jeff Homburg
- Don Lancaster
- Patrick Lyons (and ASM colleagues, eventually)
- Jim Neely
- Jill Onken

- Jon Sandor
- Susie Smith
- Maryann Wasiolek
- UA School of Anthropology
- UA Laboratory of Tree-Ring Research (a recent meeting with Jeff Dean indicates that a small amount of live-tree coring must be done to extend the chronology past AD 2000 to the present and then climate modeling can be done by a graduate student)
- UA College of Agriculture and Life Sciences (Soil, Water and Environmental Science; Craig Rasmussen?)
- Arizona Archaeological and Historical Society
- Archaeology Southwest (Jeff Clark?)
- ASU School of Human Evolution and Social Change
- Eastern Arizona College (potential base of operations)
- Discovery Park (potential base of operations/lab)
- USFS
- BLM
- San Carlos Apache Tribe
- BYU? (Mormon connection)

Funding Opportunities

- Private Donors
- Haury Endowment at UA (may be a tough sell, but worth a shot)
- Private Foundations (Southwestern Foundation, Freeport-McMoRan)
- NSF
- Tribes
- National Geographic
- Arizona Archaeological and Historical Society

Priority Tasks

- An ASM-organized collections-based summer field school based on EAC
- 100% survey and site recording (non-summer months)
- Meeting to firm up roles of partnering scientists and prioritize scientific tasks