Goat Camp Ruin Interpretive Development Project

PROGRESS REPORT

Season 9 Operations from 9/26/20 through 6/26/2021
Arizona State Museum Permit 2012-107ps 7/17/2012
J. Scott Wood Principal Investigator

Prepared by
J. Scott Wood
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Excavation

After having conducted no field or lab work during our eighth season, we resumed work last September on a restricted schedule limited by our COVID-19 Protocol which allowed us to work for only one day every other week (Wood, 2020). By the end of Spring, 2021, everyone working on the crew had been fully vaccinated and we were able to begin returning to our pre-pandemic work schedule which we hope to resume this Fall. Nevertheless, we continued to make progress toward implementing the goals established in the Excavation and Stabilization Plan (Wood 2012) with continued excavation work in Rooms 8, 28, and Feature 30 (Fig. 1). Stabilization of the site also continued with work in Rooms 7 and 15. As always, this work was performed by volunteer members of the Arizona Archaeological Society (primarily the Rim Country, Desert Foothills, and Santan Chapters) under professional supervision provided by myself and Connie Darby.

Altogether we completed 11 Saturday and 1 Sunday field sessions and 5 lab sessions.

Room 8 Complex

The Room 8 Complex is defined as Room 8 and the constructed features attached to it, namely Features 28, 29, 30, and a new feature, 43, yet to be fully defined (see below). At our current level of understanding, Room 8 was constructed first with two rooms (28 and possible 43) and two courtyards (29 and 30) attached some time later to form a functional architectural unit.

This complex is the final major excavation focus of the fieldwork proposed for Goat Camp Ruin and as noted previously (Wood 2018), will likely take several more seasons to complete.

Room 28

Returning to the room in Fall of 2020 we intended to resolve the question of the “pit” in the northwest corner (Wood 2019). Cleaning up the edges we were unable to identify a clear edge but noticed that the floor of the room actually seemed to dip downwards into it. At the same time we observed anomalies in the west wall of the room (east wall of Room 8) that suggested that it had also sagged downwards into the “pit” while the base of the north wall appeared to float above it on unconsolidated fill. We will still need to see the other side of the Room 8/28 wall once Room 8 is excavated, but our observations so far suggest that instead of a pit having been cut through the floor of Room 28 that the floor had collapsed into the loose fill that contained the pots with the bead necklace that we had recovered previously (Wood 2019). This in turn suggests that Room 28 had been built over a previous structure, possibly a pithouse, which had been deliberately – though not very efficiently – backfilled. Tracing the floor across the profile of the unexcavated portion of the north half of the room, it too seemed to fade away approaching the north wall. It was then decided to remove the tree growing in the northeast quadrant of the room and to follow out the floor by completing the excavation of the room (which would have been difficult to stabilize with the tree still in it anyway).
Fig. 1. Showing the layout of architectural features and surface collection units identified at Goat Camp Ruin (AZ O:11:72 ASM). Excavations in Season 9 were carried out in rooms F8, F28, and F30.
Given the level of disturbance expected from the tree roots and the lack of any sort of stratigraphic differentiation in the fill seen in the south half of the room until hitting the charcoal layer just above the floor, we decided to take the area down as a unit. It proved to be a daunting task because of the tree roots so that we had only partially completed this work by June of 2021. Adding to the difficulty was the nature of the fill, which was largely a solid mass of burnt daub from the collapsed roof. Adding further to the difficulty of the excavation, barely 20 cm. into the fill we began encountering the remains of crushed pots that had collapsed into the fill with the roof fall. By the end of the season, still well above the floor, we had recovered several probably reconstructable large storage vessels that had been sitting on the roof and identified what may be an extensive section of burned wall plaster high on the north wall. When work resumes, we will complete the excavation of the north half of the room down to the floor and determine a course of action to investigate the possibility of an underlying structure and its potential ramifications for stabilizing the north and west walls.

Feature 30

We continued to excavate the west half of the feature to confirm its identity as a courtyard, but had considerable difficulty defining a floor or surface. From the few indications we found – no charcoal but patches of fully consumed ash, just as was seen in Feature 29 – it conformed to expectations, but a continuous floor/use surface remained elusive. Given this issue, we suspended work in the west half and decided to excavate the east half as well in hopes of identifying the surface of the courtyard using hints from the west half in the form of ash spreads and flat lying sherds and to better define its relationship with Feature 29. So far there is clearly no opening in the north, east, or south walls of Feature 30 that would connect it with Feature 29, Room 8, or the outside.

The “exterior” trench along the west all began in 2019 was expected to clarify the one entryway into the courtyard that could be seen and possibly identify another courtyard feature. In the event, however, it brought a major surprise. As the trench came down along the “exterior” wall of Feature 30 and into the doorway we began finding large amounts of burnt daub in the fill, burnt wall plaster, scattered chunks of charcoal, and a substantial portion of burnt roof beam. The clear indication is that the one doorway in the walls of Feature 30 led not to the outside or to another courtyard, but into roofed space butted up against the outside of Room 8 (like Room 28) that showed all the characteristics of room fill. That space has now been designated Feature 43. However, we are so far unable to identify a west or south wall for the feature. When work resumes, we will complete the trench to floor level and determine a course of action that might allow us to better define this feature.

Room 8

We continued to take the fill down in levels by room quarters, completing the first level over most of the room and continuing into the second level in one quarter. Basically, the fill appears again to reflect a deliberate backfilling of the room with earlier trash as there were more of the same early buffwares and Preclassic points in the uppermost fill seen previously (Wood 2019). This is clearly the result of a deliberate act at the abandonment of the room, since it is the highest point on the site – it would be impossible for this material to have washed in by erosion. It also helps to explain the lack of any mounded early trash on this part of the site. The lithic assemblage again appears to reflect the same Apache re-occupation seen in Rooms 6, 7, and 22 in terms of the high frequency of debitage, points, and drills not seen in any of the lower levels of fill in any room excavated so far. In addition, several Apache plain sherds were recovered, further supporting that interpretation. When work resumes, we will continue the current course of action, look for any sub-features or modifications that might reflect this later occupation along with doing some additional exterior wall exposure.
**Stabilization**

**Room 15**

The wall stabilization in this room has been completed. All that remains is setting the stone to depict the collapsed rear wall for interpretive purposes, further backfilling, and removal of surplus rock from the excavation area.

**Room 7**

Work continued on Room 7; about a third or more of the resetting and repointing of the walls is complete.

**Room 6**

An assessment of the work required to stabilize this room for exhibition was made. It was determined that the level of effort required would be excessive given the nature of the construction. The base of the walls consists of large vertical slabs laid against the raw edges of an excavated pit with the weight of stacked masonry on top of that, coupled with the fact that parts of the room were constructed over soft trash fill that proved unstable even while the room was in use; providing low maintenance stabilization would require almost complete reconstruction of large sections of wall. It was decided to backfill the room and display it primarily as an outline of wall exposed at the surface with graphic reconstruction in the interpretive display.

**Artifact Processing and Analysis**

All of the artifacts from the excavations done in Season 9 were washed and re-bagged. Rough sort analysis based on the Checklist of Pottery Types for the Tonto National Forest (Wood 1987) was completed on all of the recovered ceramics and preliminary analyses were completed on all of the lithics, ground stone, and other artifact types as well.

**Ceramics**

2708 sherds were collected from excavation. Total recovery of ceramics to date now comes to 32,924 sherds: 27,068 of these are plainware (82.2%), 5,476 are redware (16.6%), and the remaining 380 sherds (1.2%) are decorated and/or imported, including imported Gila Plain, Gila variety pottery from the Salt-Gila Basin and several sherds of Apache Plain pottery. The bulk of the plain and red pottery still appears to be local (Tonto Plain and Tonto Red, primarily Payson variety followed by Verde variety), though several varieties from the Sierra Anchas, Tonto Basin, and other relatively nearby central Arizona sources were also recognized during the rough sort. As many as 25 whole or partially reconstructable vessels had previously been identified from Rooms 1 and 7, nearly all of which are locally made plainware; one or two additional whole or partially reconstructable vessels were also added to that list last season from Room 28. This season has added several more from Room 28.

Similar to the numbers previously reported, 71.5% of the imported/decorated pottery was comprised of buffwares from Hohokam sources in the Salt-Gila Basin, beginning with Snaketown R/b and continuing through Gila Butte R/b, Santa Cruz R/b, and Sacaton R/b. Other decorated wares that occurred in much smaller quantities and percentages were Tusayan Whiteware (14.5%), Cibola Whiteware (5.5%), and Little Colorado Whiteware (3.3%), in that order. These percentages have remained consistent throughout. Dating from these ceramic types continues to indicate that the site was first occupied sometime between AD 600 and AD 750, given the consistent recovery of late forms of Snaketown R/b and early forms of Gila Butte R/b and the very Vahki-like appearance of much of the Gila Plain, and continued to be continuously occupied until sometime between AD 1250 and AD 1300 – most likely about AD 1280, when the whole of the Payson area was abandoned.

The consistent presence of later forms of Snaketown R/b and early forms of Gila Butte R/b still suggests that Goat Camp began as either a Hohokam colony or a trading outpost in Early Ceramic
Central Arizona Tradition territory. In any case, the persistence of Hohokam pottery indicates that whoever the original inhabitants of the site were, they became well integrated into the Hohokam system quickly enough and were wealthy enough to engage in some fairly wide-ranging trade, at least during the Preclassic Period. After 1150, the level of imports drops drastically, suggesting a distinct change in the political and/or economic position of the settlement, possibly reflecting the rise of the much larger Risser Ranch Ruin at the top of Alpine Heights just a kilometer to the South.

Of course, the consistent percentages of plains and reds and the various decorated and imported types are something of an anomaly. The types and percentages are largely reflective of a Preclassic period occupation, but the material has all been recovered from the fill of what are obviously later architectural features. In fact, the percentages from this last season are skewed somewhat toward a higher percentage of plainware than redware. This is probably a reflection of the fact that this year’s work stayed in the upper levels of fill in Room 8 which, like others on the site, exhibits an odd mix of reverse stratigraphy and post abandonment deposition. This appears to corroborate our growing impression that most or all of the Classic Period component of the site was deliberately razed and backfilled upon leaving by its original occupants with trash from the site that dates back to the earliest Preclassic occupation of the site, after which it was later reoccupied by Apache. Perhaps the consistency of types and percentages also indicates that most or all of that backfill was coming from the same source, namely a large Preclassic trash mound that is conspicuously absent from this part of the site, but which may have been associated with the possible buried structure(s) under Rooms 8 and 28.

Lithics (general)

This year, preliminary sorting of the lithics, including projectile points and whole or fragmentary mescal knives identified 1331 flaked stone artifacts, bringing our running total to 13,906 and maintaining the same 70/30 ratio of ceramics to lithics we had last season (Wood 2019).

As in previous analyses, only a handful can be considered formal tools – projectile points, drills, and mescal knives – with very little in the way even of noticeably utilized or retouched flakes. Breakdown of this year’s recovery was 0.5% cores and large core fragments, 28.1% shatter, 52.6% flakes, 18.7%debitage, 0.2% bifaces, 0.75% projectile points, and 0.2% drills, with no mescal knife fragments found this year; except for the lack of mescal knife fragments, these percentages were consistent with recoveries from previous seasons. Further analysis may enlighten this assessment, but at the moment, the Goat Camp lithic industry continues to appear to have been expedient in the extreme with only projectile points, drills, and mescal knives being produced by local specialists or acquired by trade.

Preliminary identification of materials reinforces that assessment as it demonstrates an overwhelming (95.2%) preference for locally obtained stone, particularly the chalcedonies abundantly represented in the so-called Rim Gravels with a secondary preference for nearby chert sources and the still puzzling high use (12.1%) of the local siliceous limestones associated with the Rim Gravels and available on site as nodules in the ridge substrate. Indeed, the ratios of different types of materials remain largely unchanged, with more than 95% of all of the lithic material identified, with a few exceptions, available within a five mile radius of the site and much of it closer than that.

Mescal Knives and other Tabular Tools

Although none were recovered this last season, to date we have now recorded a total of 59 pieces comprising 10 whole tools (intact or reconstructable) and 41 fragments representing an additional 10 mescal knives and probably 2 saws. The mescal knives are almost evenly divided between rhyolite and schist (one limestone!) and the saws the same between quartzite and schist. Aside from the one limestone piece, all of this material was imported to the site.
Projection Points and Drills

The collection of points and drills recovered continues to grow with the addition of another 10 points and two drills, bringing the current total to 109 points, only 32 of which are too fragmentary to fully characterize, and 12 drills. This year all of the points came from the upper levels within the fill of Rooms 8 and 28. In keeping with the reverse stratigraphy of the fill seen in the ceramics, several of these points were very early stemmed styles common in the Preclassic.

Of the 77 more-or-less intact points, the two most common formats (each at 31.2%) remain the small side-notched triangular form with either a flat or concave base and the narrow contracting stemmed triangulars. When combined with the serrated stemmed points (two examples so far), these actually represent the largest class at 33.8%. While the side-notched points may reflect either Classic Period patterns or even Apache styles, the stemmed points all conform to patterns typically associated with Preclassic Hohokam.

The next largest class, dropping a bit this year to 20.8%, are simple triangular, split half and half between flat and concave bases. Most are small and conform to patterns common in both Preclassic and Classic Period Hohokam and Salado contexts throughout most of central Arizona. However, several of these styles continued in use well into historic times and are known to have been made by a wide variety of people throughout the Southwest, making most of them more or less non-diagnostic.

Finally, there are a few corner-notched and expanding stem points and one new lanceolate that suggest an Archaic origin; all may be points reused by later occupations, either Hohokam/Salado or Apache.

Material composition continues to follow the patterns and percentages seen last year. Most of the points and fragments (88%) are made of local silicates, primarily chalcedonies (56), cherts (34), and Preacher Canyon Chert, which is actually a distinctive local chalcedony (6). This distribution largely matches that of the general lithic population, in which the local silicates account for over 95% of the assemblage, the only difference being a higher preference for chert as a material for projectile points and the addition of some exotic materials like dacite (8.3%), obsidian (2.8%), and fine-grained basalt (1%) that are only rarely found in the general lithic population. The chalcedonies are all available within a few miles of the site. Some of the cherts, however, resemble materials from somewhat more distant sources under the Mogollon Rim to the east and include several varieties not well represented in the general population of lithics from the site.

Quartz Crystals

Three more quartz crystals were recovered this season, bringing the total to 23 intact crystals and 9 fragments, all visually identified as having come from the nearby (6 miles) Diamond Point crystal field. These three came from the upper fill of Room 8 and so may reflect the Apache reoccupation.

Ground Stone

Relatively few examples of ground stone were recovered this season but they conformed to the same patterns identified in previous years (Wood 2017). The most interesting aspect of the ground stone assemblage remains its material composition. Forty-eight portions of metates have been recovered to date including 17 whole, partial or reassembled metates (18 if you include the large portion of a trough metate left in the masonry pedestal on Room 7) and 31 isolated fragments. Altogether, then, a maximum of 35 individual metates may be represented, some from each excavated room but all from fill. Of the whole and partial metates, 12 are trough style, 3 are oval basins (one of which, on reflection, may not be an artifact after all), and 3 were slabs. Of the fragments, all appear to have come from trough style metates. Materials used remain largely unchanged from last year (Wood 2019). Almost three quarters of them are made of materials present either on site or within less than a mile: 50% are made of Tapeats Sandstone, 16.7% are made of Payson granite, and 10.4% are made of local limestone. The only imported materials are vesicular basalt (18.8%), sandstone (2%), and quartzite (2%).
In contrast, we currently have 94 pieces from 19 whole or reassembled manos and 75 mano fragments. The whole or reassembled manos are nearly all “two-hand” loaf shapes, relatively thin and well-worn for the most part, aside from a couple of “one-hand” oval pebble manos. The fragments are also mostly “two-hand” loaf manos, many of which show signs of continued use after being broken.

The rest of the ground stone assemblage (66 pieces) recovered to date breaks down as follows: 27 assorted hammerstones, (13 diorite and other metamorphics, 4 chalcedony, 4 limestone, 2 quartzite, and 1 basalt); 13 polishing stones (8 quartzite, 3 metamorphic, 1 hematite, and 1 basalt); 4 floor polisher/anvils (also counted as manos) including 2 quartzite, 1 sandstone, and 1 vesicular basalt; five whole ¾-groove diorite axes, including an unfinished blank and one that had been converted to a maul, all Classic Period Hohokam style; 4 lapstones (2 metamorphic, one fine grained basalt, and 1 quartzite; 3 grooved abraders, all of basalt; , 1 fragment of carved slate palette (surface find); 1 intact flat-ground slate plummet or pendant; 1 diorite pestle; 1 argillite (Deer Creek) pigment “core”; 1 ground blank for an argillite pendant or figurine; and 4 other odds and ends of quartzite and Tapeats that were not clearly assignable to any particular category.

The ground stone assemblage maintains the rather interesting composition seen in previous years. As noted above, the metates are few and are mostly local in origin, over 75% of them made from materials on or adjacent to the site. The manos, on the other hand, are both more plentiful and more expensive, as 84% of them are made of the same non-local materials identified previously (Wood 2017), namely vesicular and non-vesicular basalt (56.4%), andesite, quartzite, sandstone, and metamorphics. With the exception of a few hammerstones of local chalcedony, chert, and limestone, all of the other ground stone artifacts are of imported materials.

Shell

Ten whole or fragmentary shell artifacts were recovered this season, including 2 shell bracelet fragments, 4 shell beads, 2 more *Olivella* beads (from Room 28, of course), a Conus tinkler (also from Room 28), and one other unidentified fragment. This brings the total to 154 items of shell representing eight species that have been recovered to date. Most of it is still *Glycimeris* (40.3%), including 17 bracelet fragments, 2 ring fragments, 35 pendants or beads (including small entire shells with drilled umbos), a carved and polished needle, and a variety of other fragments. Together with the *Glycimeris*, the 22 whole or fragmentary *Conus* tinklers (including three whole shells with the apex ground off to make a hole) at 14.3%, the 44 *Olivella* beads at 28.6%, and the lone abalone pendant at 0.6% make up the bulk of the collection that can be identified to genus at this time. An additional 25 pieces that include a number of fragments (15) of what may be *Laevacardium (?),* several nacreous fragments, and a probable land snail round out the collection, pending more detailed analysis.

Beads, Pendants, and Carvings

Relatively few artifacts in this category have been recovered, nearly half of which were found on the surface, with only 5 additional shell beads found over the last year.

Bone, Antler, and Basketry/Fiber Industries

No bone or antler artifacts were recovered this season.

Chronological, Environmental, and Other Samples

As noted previously (Wood 2016, 2017, 2018, 2019), all but one of the enclosed/roofed rooms investigated so far burned; charcoal and burnt daub samples have been recovered from every room but 15. As a result, we now have 70 datable samples of charcoal, including carbonized beans from Rooms 7, 28, and 31 and corn kernels from Room 7. We have decided to have samples run by Beta Analytic and are still soliciting more funding toward a goal of having at least one (preferably two or three) AMS or radiometric date from every room (depending on funding).
In addition to the radiocarbon samples, we have also collected 24 pollen and 53 float samples so far from various locations and depths. We also have a total of 36 macrobotanical samples, primarily beans and corn. Funding or a skilled volunteer still needs to be procured for their analysis.

Faunal material continues to be relatively abundant across the site; the total number of samples now at 215, still mostly dead burrowing rodents, some cooked (burnt and fragmented) artiodactyl long bones and ribs, a few turkeys(?), and the occasional bunny.

Time and Value

Given our COVID restriction for Season 9, production was down considerably but we still managed to work 12 field days and 5 lab days with 34 different individual volunteers. This resulted in 996 hours of labor for a total to date of 9880 hours that have been contributed by the volunteer staff and crew, not counting administrative time, write-up, or travel for those who are not full time Payson residents. At the current Federal standard in-kind valuation of $28.54 per hour of volunteer labor, the Arizona Archaeological Society has contributed a minimum equivalent of $281,975 to the project on behalf of the Town of Payson over the last nine years.

Some Preliminary Conclusions

The work of Season 9 has basically reinforced the conclusions reached after Seasons 3, 4, 5, 6, and 7 (Wood 2016, 2017, 2018, 2019), which are repeated below, with a few minor adjustments. One of the biggest surprises of Season 9 was the fact that Room 28 appears to have been built over an earlier structure, possibly a pithouse, and that there while the interior had been cleaned out prior to its burning and demolition, a number of large storage vessels had been left on the roof to end up in the collapsed roof fall. An even bigger surprise was that Feature 30, which still appears to be a courtyard oriented in an entirely different direction from the rest of the Room 8 complex, also appears to have no exterior entry but connects via a doorway into a previously undiscovered room (Feature 43).

Based on the architecture and ceramics we have observed so far, Goat Camp Ruin still appears to have been founded before 750 AD by Hohokam colonists from the Salt-Gila Basin – or by local Central Arizona Tradition folk with very strong economic and cultural ties to early Hohokam settlements, probably those in Tonto Basin but possibly as a result of direct contact with the Salt River Valley. The ceramics still clearly indicate that the major outside influence or trade partner for Goat Camp was Hohokam, the next closest being the folks making Tusayan Whiteware. However, looking at all of the ceramics, lithic, ground stone, and other artifacts recovered to date, there appears to have been a clear drop off in trade with anyone after about 1150 or so. It appears that the folks living at Goat Camp were most connected when they were part of the Hohokam system during the Preclassic Period. And now it’s starting to look like the site took on an entirely different role in the Classic Period and was quite deliberately closed for business before it was abandoned.

Outline of Work Proposed For Season 8

Excavation and Stabilization Work: First Priority

Room 6 Backfill and clear excavation rubble.
Room 7 Complete stabilization.
Room 15 We still need to buttress the back wall with a ramp of rock and backfill the room.
Room 22 Complete backfilling.
Room 8 Continue excavation by quarters, followed by wall construction studies and stabilization. By the Spring, Room 8 should be the primary excavation focus for the project.
Room 28  Complete excavation of the room and attempt to identify the nature of the underlying structure, followed by wall construction studies and stabilization.

Feat. 29  Complete exterior wall trench to characterize relationship of entry to original ground surface.

Feat. 30  Complete current excavation unit to floor.

Room 31  Final map and backfilling.

Room 43  Complete interior wall trench to characterize the nature of the feature and its relationship to Feature 30; attempt to trace all of the walls and determine what additional work may be necessary.

**Excavation Work: Second Priority/Carryover to Next Season**

Feature 2  Clear brush and duff to expose walls, map, excavate 1m x 1m test unit (?). *

Features 4-5  Clear brush and duff to expose walls, map, excavate 1m x 1m test units (?). *

Feature 17  Clear and define retaining (?) walls, map.

Feature 24  Excavate half of this roasting pit.

Feature 26  Clear and define this presumed “retaining wall” and make surface collections along it to determine how it relates to the occupational history of the site either as an original feature or as an Apache attempt to fortify that portion of the site they had reoccupied.

Feature 32  Relocate and excavate F. 32, the slab-lined cyst, and perhaps see how it relates to the original ground surface in front of Room 1. To do this, we will need to move one of the backdirt piles from the room excavation.

Features 36-39  Clear brush and duff to expose walls, map and add to master site map.

*Additional proposed excavation work for these features will probably not be undertaken to compensate for unplanned additional work already performed in other units.

**Lab Work**

During the upcoming 10th season, we will continue to process new artifact collections and expand our analysis of the pottery, lithics, ground stone, shell, and other material recovered to date. This effort will likely continue during the summer of 2022 after the close of the spring field session. We will also initiate radiocarbon analyses with the funding we currently have available and seek to acquire additional funds for more radiocarbon and the processing of the macrobotanical, float and pollen samples.

**Other Work**

Survey/recording of contemporary and earlier sites in the Goat Camp area not already covered by FLEX or ADOT excavations. This will include compiling survey and excavation data from Risser Ruin for comparisons. Realistically, this will probably not be undertaken until the excavation phase of the project is completed.
References

Wood, J. Scott


2012 *Excavation and Stabilization Plan for Goat Camp Ruin, Payson, Gila County, Arizona.* Rim Country Chapter, Arizona Archaeological Society, For the Town of Payson Parks, Recreation, and Tourism Department, Tonto National Forest Cultural Resources Report 2008-12-58a


