Excavations at the Rooney Ranch Site

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Pima Community College, Tucson

Since the early 1970s, the Archaeology Centre at Pima Community College has focused its field class activities in the region between the western Santa Catalina and the eastern Tortolita mountains. In determining a location for the College's field school, emphasis was placed on selecting an archaeological site that was either being vandalized or was in jeopardy of being destroyed by development activities, especially if funds for the excavation of the site were not readily available to the developer. The Rooney Ranch site was in danger of destruction from the Estes Company's La Reserve development. The Estes Company, which had funded the initial archaeological survey of the Rooney Ranch property, was willing to defer construction on the part of the property where the site was located until a later phase of the development.

In 1981, the excavation class began working on the Rooney Ranch site, AZ BB:9:93 (ASM), which is on the west side of the Santa Catalina Mountains, near the northern base of Pusch Ridge and next to Cañada del Oro Wash (see illustration at right). First priority was given to conducting a surface collection, laying out a grid and developing a map of the site. Test excavations were undertaken in the northwest portion of the site next to an apparent midden. All except one of the excavations encountered a noncultural, cobble stratum about 10 centimeters below the surface. The exception was one outlying test pit, which went to a depth of over 1 meter through an unstratified, dark cultural soil.

During the next field season, excavations commenced in the area of the deep test pit. This proved to be a fortuitous choice as the test pit turned out to be in the middle of Pithouse 1. As with all but one of the Rooney Ranch pithouses, it was extremely large and quite deep, as is discussed below. Due to the structure's size, the excavations extended well beyond the end of the semester. Excavation the following year was moved to a pithouse on an adjacent ridge to the southeast, in an attempt to determine whether such a large structure as Pithouse 1 was an anomaly or characteristic of the site. Additionally, the ridge containing Pithouse 2 was slated for road construction activities. Subsequent excavations revealed that Pithouse 2 was on the same scale as the first pithouse. Work has continued on this ridge in an attempt to discover whether patterns and interrelationships among the pithouses can be discerned.

In addition to our excavation work, the entire Rooney Ranch site and an adjacent archaeological site, AZ BB:9:4 (ASM), located across a large wash to the northeast, have been mapped with surveying instruments.

(Continued on page 2)
Depending on the time and circumstances, the houses are mapped either by advanced students or by staff members.

THE PITHOUSES. Nine pithouses have been excavated at the site by the Pima Community College field classes. The first pithouse excavated was on a ridge overlooking Cañada del Oro Wash in a section of the site that apparently contains the densest concentration of houses and features. The remaining excavated houses (numbers 2-9) are clustered on a finger ridge extending from the Santa Catalina Mountains in an area peripheral to the major house concentration (see illustration at left). These excavated houses are very different from contemporaneous structures at surrounding Hohokam sites. All the pithouses are larger and deeper than most "typical" Hohokam houses, a fact that is especially interesting because they are dug into extremely rocky and compact soil. Unfortunately, rodents like the softer dirt that filled the houses, and the creatures' burrows have made it quite difficult to define the house floors.

FIELD STRATEGIES. Field strategy at Rooney Ranch has been guided by two overriding factors. First, the excavations are intended to be a learning experience for the students; and second, the excavations can never be scheduled for more than one semester at a time. The faculty and staff at Pima College feel strongly that an excavation class should be structured so that the students receive the maximum amount of field training and are not merely used as free labor. The time constraints imposed by the possibility that construction might begin at any time made long-term strategic planning impossible. It is only because of Tucson's slowdown in housing construction that the excavations have continued as long as they have.

These constraints have focused the excavations on pithouses, which are readily visible from the surface. The upper levels of the pithouses are removed while the students are learning basic techniques, and by the end of the semester when they have honed their excavation skills the floor levels are excavated. Few tests of areas outside the pithouses have been done, but where testing was done no features were located. Due to the necessity for close supervision and the fact that class sizes have been increasing steadily over the last five years, pithouses are often chosen for excavation based on their proximity to other pithouses concurrently under excavation.

All houses are excavated in rectangular units measuring 2 by 2, 1 by 2, or 1 by 1 meters, in 10 or 20 centimeter levels, with all units and levels screened. Floor furnishings and artifacts are point-provenienced. After excavation, each pithouse is mapped using the "Topcon Total Station," an electronic distance meter with theodolite.

An interesting variety of artifacts was recovered from the floor. A Middle to Late Rincon Red-on-brown bowl was found next to the hearth, dating the house to the AD. 1000-1150 portion of the Sedentary period. The most unconventional artifacts were a copper bell (illustrated on page 1) indicating trade with Mexico, and half a bighorn sheep mandible possibly representing ceremonial activities. This house contained the largest quantity of shell and Phoenix Basin buffware pottery, again pointing to trade. Four projectile points, five quartz crystals, five polishing stones, a steatite awl and a stone cylinder were also found on the floor. This assemblage suggests that Pithouse 1 was used for special activities such as ceremonies instead of for regular household activities.

All illustrations accompanying this article were provided by the Centre for Archaeological Field Training, Pima Community College, Tucson. Artifact drawings (pages 1, 3, and 8) are by Carol Rosenow.
Pithouse 4. Like House 3B, Pithouse 4 also faced north and was similar in construction to Pithouse 2. The house burned and contained many artifacts including manos and metates, an agave knife, polishing stones, a bone awl, and some shell. The ceramics date the house to the Middle to Late Rincon phase. A most interesting feature of this house was the quantity of round, worked sherds recovered from both the floor and fill. These have been interpreted alternately as "gaming pieces" or spindle whorl blanks; their exact function is not known.

Pithouse 5. The fifth house was different from the others and may actually represent two houses, although this could not be determined during excavation. It measured 28.75 square meters and was 53 centimeters deep, so while it was large, it was significantly shallower than the other houses. Two hearths were found, but no entryway was discovered. The assemblage indicates that household activities and possibly manufacturing were performed there. Artifacts on the floor included manos, metates, a redware plate, a large plainware jar, polishing stones, a turquoise bead, copper and mica minerals, shell, and buffware ceramics.

Pithouse 6. This was the most difficult house to excavate because it had been remodeled several times. At least three separate floors were found, extending to a maximum depth of 1.8 meters. The upper floor (1.1 meters deep) was the most clearly defined because the upper house had burned. The entryway faced north and the house measured 24 square meters. The house contained a very unique assemblage of ceramic vessels. Twelve reconstructible vessels were found along the east and west walls. These were all plainware, but preliminary analysis indicates they were made using the coil and scrape technique instead of the paddle and anvil technique generally associated with the Hohokam. One had appliqué neck-banding, a trait common in Mogollon.

Pithouses 3A and 3B. Houses 3A and 3B were two superimposed structures next to House 2. The upper house, 3B, faced north and was fairly small (13.5 square meters) and shallow (85 centimeters) compared to other houses at the site. The recovered artifacts, including two metates turned upside down on the floor, point to normal household activities. House 3A was larger (26 square meters) and deeper (1.03 meters) than 3B. No entryway was found during excavation, so it is not known whether it was oriented in the same direction as the upper house. Pithouse 3A burned catastrophically so many artifacts were left in it, including manos and metates, a shell ring and pendant, a stone palette, half a stone ax, polishing stones, a stone censer, two bone awls, and three Rincon Red-on-brown bowls, one with a scoop inside it (illustrated at right). Burned sticks found beneath the bowls may be remnants of woven matting.

Sketch of Pithouse 1 at the Rooney Ranch site showing floor artifacts (clustered stones are from later, intrusive pit.)
ceramics. Unlike other excavated houses at Rooney Ranch, no decorated Rincon phase ceramics were found in floor context. Other material on the floor included marine shell, a turtle shell, a heishi bead, a stone ring and stone pendant, an agave knife, and other ground stone. The house may have been a storage room of some kind; additional analysis should provide more information on what it was used for and what period it dates to.

Pithouse 7. Pithouse 7 shows a dramatic contrast to House 6 in terms of the quantity of material recovered. The house did not burn, and an accumulation of gravel in the fill indicates it was either left open or refilled by the occupants after it was used. Very few artifacts were recovered, so little can be said about the occupation of the house. Because the house was not completely excavated, its orientation is unknown (no entryway was found).

Pithouse 9. Pithouse 9 was more like the "typical" Rincon-phase houses found at other Hohokam sites. It faced southeast and was substantially smaller than other houses, measuring 9.3 square meters. It was also shallower than the other houses, at 77 centimeters deep. The floor contained a number of artifacts including redware ceramics, shell, ground stone, minerals (copper silicate and mica), a palette, and four pieces of turquoise. The artifacts were similar to those in House 5. Both these houses were shallower than the other houses at the site, suggesting they represent a separate occupation.

Currently Being Excavated: Pithouse 8. As this article goes to press, students are just completing the excavation of Pithouse 8. This house is showing all the characteristics of the other Rooney Ranch houses: it is large, deep, and burned, and it dates to the Middle to Late Rincon phase.

One final interesting characteristic of the site is that there are several instances where roasting pits were dug into the fill of abandoned houses. Although this suggests use of the site beyond the Rincon phase, it is possible that the features were outdoor pits dug by Rincon phase site occupants who merely took advantage of the soft dirt in recently abandoned houses, rather than trying to dig their roasting pits in the harder, undisturbed areas of the settlement.

SEARCHING FOR ANSWERS. Many questions exist about the occupation of the Rooney Ranch site. One major issue is its relationship to other ancient ruins in the vicinity to the north of Rooney, including the Romero Ruin (AZ BB:9:1) in Catalina State Park, and Honey Bee and Sleeping Snake villages (AZ BB:9:88 and BB:9:104), two Colonial-Sedentary period sites with ballcourts. Further investigations of Hohokam sites in similar environmental zones are needed to determine if Rooney Ranch is unique or if sites in comparable environments have the same types of features and artifacts. Studies yet to be conducted on pollen and other plant and animal materials collected from the site have potential to answer questions concerning exploitation of the rich and varied environment on the west side of the Catalina Mountains. Additional work in other parts of the site, including areas outside of the pithouses, will reveal the settlement's layout and organization. Finally, Rooney Ranch apparently was an important part of an active trade network, and additional analysis will pursue this line of research.

Excavations at Rooney Ranch will continue in the fall of 1992 in the section of the site near Pithouse 1. We hope that continued research at this ancient settlement will provide answers to many of these intriguing questions.

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Lower San Pedro Survey Area to Be Expanded

Relying on its many volunteers, the Center for Desert Archaeology will resume searching for archaeological sites in the San Pedro River valley late in January. In our surveys along both sides of the river northward from Redington the past two years, we've recorded over 200 sites. Only a few miles more and we'll reach the Gila River! Once there, we'll go back to Redington and shift our site-searches southward. The next survey dates are:

- Sunday, January 19
- Saturday, April 4
- Saturday, February 1
- Sunday, April 12
- Sunday, February 16
- Saturday, May 2
- Saturday, March 7
- Sunday, May 17

To participate in this survey, all you need to do is:
1. be a current member of Archaeology in Tucson,
2. be able to walk 3 miles in the desert in one day, and
3. call Al Dart (327-3509) to reserve your place on our schedule (even if you've volunteered previously)!
Arizona Archaeology Week
Many Events Planned for the Week of March 14-22

March 14 through 22 is the 10th annual Arizona Archaeology Week celebrating the state's archaeological heritage. In order to recognize the cooperation that exists among government agencies, private companies, professional archaeologists and historians, and the many folks who volunteer their time on behalf of archaeology and historic preservation in Arizona, Partners in Preservation has been selected as the theme for Archaeology Week 1992.

The extended week of archaeological activities around Arizona will be kicked off with the annual Archaeology Fair sponsored by the State Historic Preservation Office and the Southwest Archaeology Team ("SWAT"). The fair will be held at Casa Grande Ruins National Monument, just outside of Coolidge, from 9 AM to 4 PM on Saturday and Sunday, March 14-15. During these two days no admission fees will be charged at the Monument, and special tours will be offered into parts of the Monument not normally open to the public. Also, at least 30 volunteer and professional organizations will sponsor over two dozen booths, demonstrations, and activities oriented toward both children and grownups. It's not too late to volunteer to help out at the fair.

Many other activities are planned across the state beginning the weekend of March 14-15. Among these will be the Center for Desert Archaeology's free guided tours of the Romero Ruin in Catalina State Park (see announcement, this page); special tours of archaeological sites around Tucson and in the San Pedro Valley by the Arizona Archaeological and Historical Society; special programs at Homolovi Ruins State Park near Winslow; slide shows, talks, and exhibits in the Tucson and Phoenix metropolitan area libraries; a bookmark contest for schools, sponsored by the Arizona Archaeological Society; and hikes, tours, workshops, and special programs at local parks by the Pueblo Grande Museum in Phoenix.

In mid to late January the State Historic Preservation Office will produce and distribute a Calendar of Events and an Archaeology Week Poster. The poster will feature the art of Jerry Jacka, the famous Arizona Highways photographer whose work also graced the most popular Arizona Archaeology Week poster produced in 1988. Salt River Project has kindly agreed to print the posters with a generous donation from the Bureau of Land Management.

Volunteer to be Recognized

The Archaeology Advisory Commission is sponsoring the 5th annual Volunteers in Archaeology Award for 1992. Offered as part of the annual Arizona Archaeology Week celebration, this special award is given to a person who has contributed his or her time and energy to promoting the protection and preservation of Arizona's archaeological resources through public education or other means. If there is someone who you think deserves recognition for his or her volunteer efforts in archaeology, please write a nominating letter to the Archaeology Advisory Commission Chairperson, State Historic Preservation Office, Arizona State Parks, 800 W. Washington, Suite 415, Phoenix, AZ 85007. Letters of nomination should outline the individual's accomplishments, and must be postmarked by Monday, January 27, 1992. A photograph would be appreciated but is not required. For more information, contact the State Historic Preservation Office, (602) 542-4174.

For more information on Arizona Archaeology Week, or to receive a Calendar of Events, contact Teresa Hoffman at the State Historic Preservation Office, (602) 542-4174 or 542-4009.
Archaeological Consulting Services, Ltd. (Tempe). ACS recently signed a contract to provide on-call archaeological services for the Bureau of Reclamation, mainly in central Arizona; tasks will include archaeological survey and testing on the Salt River Indian Reservation, and site relocation and assessment along the Verde River around Horseshoe Reservoir.

Arizona State Land Department (Phoenix). In October, with the aid of 62 volunteers, the State Land Forestry Division, the Perryville Prison Fire Crew, and students from Gilbert High School, ASLD fenced off part of the Adamsville Hohokam site between Coolidge and Florence. The barbwire fence is designed to protect the site's platform mound and ballcourt from vandalism and offroad vehicle traffic, but built in gaps will allow educational visits to continue.

Arizona State University (Tempe). In October 1991 the Anthropology Department's Office of Cultural Resource Management began excavating at the Cline Terrace site in the Tonto National Forest. The project is part of the Roosevelt platform mound study sponsored by the Bureau of Reclamation in conjunction with modifications to Roosevelt Dam. Cline Terrace was occupied ca. AD 1280-1450. Preliminary excavations suggest it contained two interconnected platform mounds partly faced with gypsum walls, and that the outer wall that enclosed the platform mound and a plaza into a compound was substantial enough to have served for defense.

Budding archaeologists of all ages are invited to participate in ASU's free Open House at Cline Terrace on Saturday, February 29 from 10 AM to 4 PM. During this event visitors can tour this impressive Salado site and join the crew for dig and lab activities. There will be lectures, exhibits, and demonstrations of prehistoric crafts and archaeological techniques. To get there from Tucson, go first to Globe, then travel west on U.S. Route 70 and turn on State Route 88, toward Roosevelt Dam. Just past the town of Roosevelt, take Route 188 across the new bridge, continue approximately 11 miles and turn right on A+ Cross Road. Follow the signs 3.25 miles to the site, taking right-hand turns at each fork in the dirt road. In the event of heavy rains, listen for radio reports concerning alternate plans for the Open House.

Bureau of Land Management (Phoenix). With the National Park Service, the BLM is currently planning for long-term management of the former Empire Ranch near Sonoita. This venture has already resulted in collections of extensive oral histories, old photographs of the ranch and its owners, and historical records. After Walter Vail and two English partners purchased the Empire's original 160 acres in 1876, the holdings were soon expanded to several thousand acres, giving the Vails control of water sources and, consequently, the public rangeland of their era, with the original ranch house as the anchor. Most of the ranch buildings are 100 to 120 years old and have been well maintained by the Boice family and Anamax Mining Company, subsequent owners. The building complex, now listed on the National Register of Historic Places, will be the focal point of the BLM's Empire Resource Conservation Area.

Cultural & Environmental Systems, Inc. (Tucson). C&ES recently completed field work on two archaeological survey and excavation studies near Tucson and Kearny, as part of ASARCO, Inc.'s planning for expansions of mining developments. In the Silver Bell Mountains near Tucson, ASARCO sponsored a complete survey of over 5000 acres, resulting in identification of 21 archaeological sites, mostly of the Historic period. To partly offset any damage that expansion of its Silver Bell Unit might cause, ASARCO sponsored archaeological studies of AZ AA:10:20 (ASM), the Silver Bell town site established in 1903 and essentially abandoned by 1930; AZ AA:10:19, the grade of the Arizona Southern Railroad; and AZ AA:10:8, a miners' encampment known historically as Atlas Camp, located along AZ AA:10:19 near Silverbell. The other project included a complete archaeological survey of 1700 acres and data recovery studies at five prehistoric sites likely to be impacted by expansion of ASARCO's Ray Complex facilities near Kearny. Of particular interest during this project was the excavation of AZ V:13:96 (ASM), a rockshelter site associated with a large, agricultural rock-pile and checkerboard-field site, AZ V:13:69 (also investigated). Excavation and collection of materials from the entire 10m by 10m rockshelter and areas adjoining it produced evidence for long-term Archaic and Hohokam use of the area. Preservation within the rockshelter was excellent: besides large amounts of ceramics and stone artifacts, the site yielded extensive collections of perishable materials including yucca sandals, basketry, cotton fibers, cordage, cloth, and macrobotanical remains (particularly corn cobs). The other sites investigated (AZ V:13:94, V:13:95, and V:13:97) were small artifact scatters possibly representing procurement and processing camps.
Desert Archaeology, Inc. (Tucson). A recent excavation project in downtown Tucson at AZ BB:13:405 (ASM), near the site of the recently razed Catalina Hotel, demonstrated that several Historic-period features initially thought to have archaeological value were either without substance or had already been disturbed by people digging for bottles. However, two intact features with good samples of historic material culture dating between 1910 and 1930 were investigated. One feature was a rectangular trash pit. The other was a cylindrical pit, originally roofed (possibly for use as a cistern or root cellar) but later filled with earth and trash.

In southwestern Arizona, recent surveys on the Tohono O'odham Reservation for the Indian Health Service have identified several archaeological sites in the Quijotoa Valley southeast of Pisinimo; in Gu Oidak Valley southwest of Nolic; in La Quituni Valley just east of Organ Pipe Cactus National Monument; and near North Komelik in the Santa Rosa Valley. Farther west, on the Barry Goldwater Air Force Range, sample-surveys of approximately 2260 acres identified 6 sites on the Sentinel Plain, 6 sites in the Mohawk Mountains area, and 8 sites in the vicinity of the Crater Range.

Pima County Department of Transportation (Tucson). Anticipating extension of the Santa Cruz Riverpark, Pima County will sponsor archaeological testing this month near where the historic San Agustin Mission was established on the west bank of the Santa Cruz River. The project, to be conducted by Statistical Research, Inc., is thought to be where an O'odham village grew up around AD. 1800 after the mission was founded. Purpose of the project is to determine whether any archaeological features still exist beneath a layer of historic landfill.

Statistical Research, Inc. (Tucson) Besides the testing project described above in the Pima County report, SRI will also test a site with Classic period Hohokam as well as Historic period homestead components, near Tucson's 49ers Country Club. Also anticipated in the next few months are more surveys on Fort Huachuca Army Base.

SWCA Environmental Consultants (Tucson). Excavations for the Arizona Department of Transportation at the Hohokam site of Los Hornos, in Tempe, will continue through January. Work on this project so far has resulted in the discovery of approximately a dozen structures dating to the Snaketown through Sacaton phases (pre-AD. 700 to AD. 1100). Some redware ceramics that may predate the Snaketown phase were also recovered but no seem to be associated with any of the houses yet identified.

US West is sponsoring SWCA's archaeological data recovery excavations at the Paloparado site, about 12 miles north of Nogales, Arizona. Paloparado was one of only a few large, late Classic period villages in the Santa Cruz Valley. Charles DiPeso, who conducted extensive work there in the 1950s, believed that its occupations continued until after the valley was settled by the Spanish.

SWCA is also conducting a 1400-acre archaeological survey along the Gila River northeast of Safford for AZCO Mining Company. Sites recorded so far date from the Archaic through Ceramic periods and include scatters of stone artifacts (some with San Pedro projectile points) and agricultural sites with rock piles and gridded rock features. This survey adds to a previous survey of 1800 acres done for AZCO in the same area; one lithic site recorded previously included a fluted, Clovis-like projectile point.

University of Arizona (Tucson). The Arizona State Museum, the Department of Anthropology, and the Southwest Center will cosponsor the Third Southwest Symposium on Friday-Saturday, January 17-18, in Tucson. On Friday, papers will discuss geographic and demographic scale of prehistoric Southwestern communities; using archaeological materials for interpreting global change; development of social complexity in the Southwest; and ritual and symbolism among the ancient Anasazi and Hohokam. Social relations in ancient agricultural production and behavioral perspectives on technological strategies are Saturday's topics. To conclude the symposium, representatives of Indian tribes will discuss Native American perspectives on archaeological interpretation. For details call Paul Fish (621-2556) or Jeff Reid (621-6297).

Late Item: Center for Desert Archaeology to Search for Tucson's Historic Presidio Wall

As this newsletter was going to press, notification was received that the State Historic Preservation Office will award a $5,000 grant to the Center for Desert Archaeology and the El Presidio Trust. The grant, which must be matched by another $5,000 from the Center and the Trust, will allow us to follow up the promising results of our ground-penetrating radar explorations of the downtown area (carried out last summer). Field work, tentatively scheduled for March or April 1992, will involve hand excavation of two or three narrow trenches to evaluate whether the Presidio wall is indeed preserved underground in several places where it has not been documented before. Also cooperating in this project are the City of Tucson, Pima County, the University of Arizona, and several private companies. Future newsletters will provide ongoing coverage of this important project.

Prehistoric copper bell found in excavation at the Rooney Ranch site. Illustration by Carol "Kay" Rosenow.

The Center for Desert Archaeology

The Center for Desert Archaeology is a nonprofit research and education organization that specializes in the study of archaeology and history of desert regions. Our primary research focus has been southern Arizona.

Archaeology in Tucson

Archaeology in Tucson is the membership program of the Center for Desert Archaeology. The Archaeology in Tucson Newsletter is published quarterly and is one of the benefits that members receive. Lectures, site tours, discounts on publications, and participation in archaeological field projects are additional membership benefits. Memberships run a full year from the time they are received.

Archaeology in Tucson Membership Application

Name_______________________________________
Address______________________________________
City_________________ State ___________Zip_______
Telephone____________ Amount Enclosed: $________

MAIL APPLICATION AND PAYMENT TO:
Center for Desert Archaeology 3975 N.
Tucson Blvd.
Tucson, AZ 85716

Annual Membership Rates

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For further information about the Center for Desert Archaeology or about Archaeology in Tucson call us at (602) 881-2244.