# **ARCHAEOLOGY IN TUCSON**

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gists. Most prehistoric groups of

the Southwest had social ties with

neighboring groups that resulted

in the widespread movement of

nonlocal items, such as pottery.

When people moved over long

distances, they carried only the

most essential items, so material

items indicating that a new group

moved into an area are difficult to

find. Architecture and pottery

often provide the best evidence.

When people arrived in a new

area, they may have built their

houses in the style of their

homeland, but this might not have

been the same as the local style.

Similarly, when a pottery style

that developed in one area appears

suddenly in a new area and is

made with materials that are local

to that new area, movement of

# The Centuries before Coronado: The Classic Period on the San Pedro River

By William H. Doelle, Ph.D., Center for Desert Archaeology

The San Pedro River-a north-south corridor along the eastern edge of the Sonoran Desert-has long been a centerpiece in historical debate over the route that carried Fray Marcos de Niza and Coronado north to the pueblos of Cibola, modern Zuni, in 1539 and 1540. For more than a century, archaeologists, too, have penned a steady flow of words about the inhabitants of this river just prior to those famous journeys. Because volunteers from the Center for Desert Archaeology spent  $4 \frac{1}{2}$  years surveying the San Pedro, there is now a large infusion of new data relevant to this archaeological debate.

linear distance of 75 miles-Archaeology in Tucson members

searched nearly all of the likely locations along the floodplain margin that were accessible to us. The result of this all volunteer survey is the recording of just over 500 sites and the collection of 3.000 artifacts.

A central goal of the Lower San Pedro survey was to shed new light on the Classic period. For convenience, this time period is broken into the Early Classic (A.D. 1150 to 1300) and Late Classic (A.D. 1300-1400). Charles Di Peso, Hayward Franklin, Bruce Masse, and Lex Lindsay have argued that migrations of various scales brought new people to the San Pedro in the late 1200s or slightly later. Interestingly, most previous researchers have not recognized the existence of a system of platform mounds along the San Pedro. Preliminary analysis of our survey data suggests that there may be an important relationship between the platform mound distribution and the issue of prehistoric migration.

#### **Evidence for Migration**

Documenting migrations and determining the cultural identity of prehistoric groups are thorny issues for archaeolo-



From Winkelman on the Classic period platform mound distribution. Larger mounds and north to Benson on the south—a greater numbers of mounds are found on the Salt and Gila rivers. Five other local systems are known to the east and south. Other areas mentioned in this text are also shown.

people has probably taken place. For the San Pedro, looking at a number of different items provides the best way to address the Classic period migration issue. Two types of pottery, corrugated wares and the painted type called Tucson Polychrome, are considered. Some architectural details that appear to have come from outside the San

Pedro area are mealing bins; rectangular, slablined hearths; and something that Lex Lindsay calls the "entry box complex." Also considered significant is the possible presence of kivas at two excavated sites. the Reeve and Davis ruins, which are located just south of Redington.

These items are illustrated as "Evidence for Migration?" throughout this article.



Evidence for Migration? This kiva was excavated at the Davis Ruin near Redington in 1956. Photo courtesy of the Amerind Foundation, Inc., Dragoon, Arizona.

#### **The San Pedro Platform Mounds**

The earliest scientific excavations in southern Arizona were carried out in the 1880s by Frank Hamilton Cushing at several large platform mound sites in the Phoenix area. That work showed that platform mounds were large structures that were artificially filled to create a raised surface. Rooms were then built atop the mounds. Similar mounds, though often much smaller, have been found along the Gila River, throughout the Tonto Basin, in the eastern portion of Papaguería, in the Tucson Basin, in the area between Tucson and the Gila, and on the lower San Pedro.

The Lower San Pedro survey documented 10 large sites that contain one or two platform mounds. Their distribution and a plan of the village and its enclosing walls are shown on the adjoining page. At present, nine of these 10 sites are still preserved.



Evidence for Migration? Corrugated pottery is believed to be most common in the early Classic period along the San Pedro. It represents the adoption of a nonlocal technology for pottery manufacture.

#### Platform Mound Communities

The San Pedro mounds form two distinct groups. First, there is a tight cluster of four mounds near the mouth of Aravaipa Creek. Second, after a seven mile gap in which no mounds are found, platform mounds are spaced at regular four-mile intervals from Mammoth to just north of Redington. A question comes to mind: Was community organization appreciably different in these two areas?

The southern group gives the impression that each site with a

mound was the focus of a single community. Geographers have found that agricultural people usually locate their fields less than 2.5 miles from a permanent settlement If the fields are much farther away, anew settlement tends to form, or at least temporary residences are established closer to the fields. The observed spacing in this southern group strongly suggests that each village had irrigated fields along the San Pedro bottomlands, and that there was little or no overlap of the key agricultural land of any village. Although neighboring villages almost certainly interacted, each settlement in this southern group appears to have maintained a substantial degree of autonomy.

The four mounds at the mouth of Aravaipa Creek are all on the east margin of the San Pedro, with only 4.2 miles separating the northernmost and southernmost villages. This distance could have been walked in less than two hours. The richness of the local environment was clearly an important factor in allowing for such a dense population. Both Aravaipa Creek and the San Pedro offered extensive areas of fertile agricultural land, and water would have been abundant in the perennial Aravaipa Creek and in springs along this stretch of the San Pedro. In addition, this location was an important transportation crossroads. To the north and south were other villages along the San Pedro. To the west, Putnam Wash carried travelers to either the Middle Gila or the Tucson Basin. To the east, Aravaipa Creek provided access to the Safford area. Opportunities definitely abounded in this rich zone.

However, abundance can bring problems. Larger groups are more prone to personal conflicts. Sharing of irrigation canals



Evidence for Migration? Typical hearths in southern Arizona are basin-shaped and clay-lined. This square, slablined hearth was excavated at the Redington Ruin in 1935.

and productive agricultural land becomes more complex with increased population. Trade requires effective organization to produce trade goods and increases contact with outsiders. These four villages may well have experienced all of these problems. As a result, they may have developed more ways to cooperate, as well as methods to resolve disputes when they arose. Exploring these issues further will be a priority for future research along the San Pedro.



Evidence for Migration? This photo shows the slab-lined hearth, deflector, and short wing-wall connecting the hearth and the entry. This has been defined as an "entry-box complex." It occurs in the Kayenta area and at Reeve Ruin. Photo by Jeffrey S. Dean.



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support a grinding slab at an angle. Ground meal is caught at the lower end of the slab.



### The Function of San Pedro Platform Mounds

The maps of individual sites show a striking pattern of the San Pedro platform mound system—most villages have two mounds. Several factors may be relevant to this pattern of dual mounds. First, they are present in several cases where two compounds grew together (Fleiger, Buzan, and Camp Village). Second, in two cases (Leaverton and 111 Ranch), a square or rectangular mound is located to the west of a very long, low mound. The space between the two facilities appears to have been open, suggesting that an open plaza may have linked the two features into a single complex. Finally, the site of High Mesa combines a large mound and a very small one. This diversity gives the impression that platform mounds on the San Pedro had more than a single function.

Another consistent aspect of the San Pedro mounds is their relatively small size. The tops of the mounds have often been heavily damaged by pothunters, making it difficult to evaluate what was once located there. Only a few mounds have enough space on top for a residence. Most likely, platform mounds along the San Pedro were used primarily for ritual observances perhaps with both public and private elements. At a number of sites, the mounds apparently had attached rooms that appear to have been residential, though none have been excavated. Perhaps one or more social groups with a higher status or a special role in the community were directly associated with many mounds.

#### **Dating the San Pedro Mounds**

No platform mound sites in the San Pedro River have evidence of founding and abandonment within the early Classic period. Thus, either these mounds were all established within late Classic times, or any founded during the early Classic period continued to function into the later period. All sites show significant growth over time. Recent work by Arizona State University and Desert Archaeology suggests that platform mounds were first constructed in the Tonto Basin around A.D. 1275. A similar date appears to be a reasonable estimate for the earliest San Pedro mounds as well. Evidence for Migration? Maverick Mountain Polychrome (left) was made in the Safford and Point of Pines areas from the late 1200s to 1350. A very similar type, Tucson Polychrome (right) was made during ,he some time period in the Redington area and the Tucson Basin. Both types derive from slightly earlier pottery from the Kayenta area.

Evidence For Migration? Mealing bins

are formal, slab-lined enclosures that

#### **Mounds and Migrants**

If we re-examine the map on page 3, it is readily apparent that the sites considered part of the Classic period migration into the San Pedro are all located near Redington—*beginning immediately south of the distribution of platform mounds*. There are other clues that this general area received outside ideas and people for a fair length of time.

During the San Pedro survey, pottery from the Mimbres area of southwestern New Mexico was found almost exclusively in the southern half of our study area. In addition, sometime during the 1200s corrugated pottery became relatively common in the Redington area, extending north as far as the Mammoth area and moving into the Tucson Basin by the late 1240s (see AIT newsletter article on the Gibbon Springs site, October 1994). Tucson Polychrome, a type that dates from 1275 to 1350, is found in this same general area. Lex Lindsay has pointed out the close stylistic similarity of Tucson Polychrome pottery and Maverick Mountain polychrome that is known from the Safford and Point of Pines areas. Maverick Mountain polychrome is believed to derive from ceramic traditions of the Tusayan and Kayenta areas of northern Arizona. Thus patterns of pottery distribution indicate nonlocal ties that are centered in the Redington area from at least AD. 1000 onward.

The four excavated sites near Redington merit closer attention. At Davis, Rex Gerald excavated remarkable evidence of a kiva in 1956 under a graduate student internship with the Amerind Foundation. Right across the river at the Reeve Ruin, Di Peso found a site with many nonlocal elements, including what Lex Lindsay considers to be a very Kayenta Anasazi-like "entry-box complex." Due to the quantity and "purity" of nonlocal elements, these two sites are the strongest cases indicating a substantial presence of migrants.

The distribution of other elements that are illustrated here as "Evidence for Migration?" is briefly reviewed. Even at the Reeve Ruin, where sandstone was abundant locally and was the principal construction material, slablined hearths represent just under half of the total number of hearths. Single cases are known from the Redington Ruin, the Second Canyon site, and Tres

### **Classic Period Development at the Second Canyon Ruin**

For four months in late 1969 and early 1970. Laurens Hammack and Hayward Franklin of the Highway Salvage program of the Arizona State Museum excavated the site of Second Canyon. The site is located on the west side of the San Pedro River, about four miles north of Redington. It yielded 17 pithouses



Up to seven pithouses may have been present at once. Note that all houses except one have entrances facing east and appear to represent single-house households. The only exception (near the site center) probably rep-resents a two-house household. Occupation covers the entire site area. Please note that dates are rough approximations. Also. the dashed compound on the Tanque Verde phase maps is only to give all maps a common frame of reference.

and 22 surface rooms. The developmental sequence at this site offers important insights into the transition from the early to the late Classic period.

Hayward Franklin wrote a detailed report on this site as part of his doctoral dissertation. In the report, he provides information making it possible to redraw his

Late Tanque Verde Phase (ca. 1275 to 1325)

Differences are evident between the north and south halves of the settlement. In the north half there appear to be four possible households, two of single structures and two of paired structures. One of the paired structures shares a common wall between the two houses. In the south half of the site, at least one block of three contiguous rooms is present. A second set of three contiguous rooms develops during this time period. Two individual structures are also present. site map to show three separate developmental stages, which span from the early to the late Classic period. For more information, see the 1980 publication, *Excavations at Second Canyon Ruin, San Pedro Valley, Arizona*, by Hayward Franklin (Arizona State Museum Contribution 10 Highway Salvage Archaeology in Arizona No. 60).

> Early and Mid-Tucson Phases (ca. 1325 to 1360)



Early Tucson Phase (ca. 1325 to 1350): The compound wall and the various internal walls within the compound were constructed. Limited addition of rooms is in process at this time. Mid-Tucson Phase (ca. 1350 to 1360): This is a relatively short period of time. The south half of the site was largely abandoned. Several rooms under construction in the north half of the site were never completed. All rooms in the north half of the site were burned at abandonment. Alamos. Mealing bins are present in one ramada at Reeve Ruin, in two adjacent rooms at Second Canyon, and in one room at University Ruin. The impression, then, is that these nonlocal traits are present, but not overwhelmingly abundant, even in the strongest cases of immigration.

The Second Canyon site (see pages 4-5) provides a fascinating glimpse of the process of immigration to a single small site. The room block at the south end of the site represents the first appearance of this type of architecture at this site. In addition, mealing bins were located in the corners of two of the large habitation rooms in this area. Finally, a rectangular, slablined hearth was located outside one of the rooms in this area, and a second outdoor hearth had an upright stone placed next to it to act as a deflector. All of these features are decidedly atypical of contemporary sites in southern Arizona. Thus, one or two households-fewer than 20 persons-may have joined a larger group of pithouse dwellers who were already living at the site. There was little immediate effect on the layout of the rest of the village, for people kept living in pithouses as they had done before. However, within 25 to 50 years, architectural changes are evident, and a shift to roomblock type architecture occurred.

#### **The Process of Migration**

From our distant perspective many centuries after the actual events, it is easy to lose sight of the fact that migrations over long distances were often traumatic experiences. To leave a familiar homeland, where one's traditions are rooted and one's ancestors are buried, was not undertaken lightly. Unfortunately we cannot trace the San Pedro migrants to an exact point of origin. We can, however, see some of the ultimate results more clearly.

At the Reeve Ruin. most, or even all, of the residents appear to have come into the Redington area as a group. It seems likely that they called upon some form of existing tie with the residents of the Davis Ruin. Perhaps the kiva-based religious system was broadly shared between the two groups, or maybe more direct personal ties were already established. Reeve Ruin was built immediately across the river from Davis, but in a highly defensible location, suggesting that the groups wanted to maintain some social distance.

The Reeve Ruin had only 29 rooms and three ramadas. Di Peso identified 15 of the rooms as storage rooms and 14 as dwellings. Even if we assume that all of the dwellings were occupied at once (a highly unlikely assumption), and that as many as six persons lived in each dwelling, only 84 persons would be represented at this site. A population between 35 and 60 seems a more conservative and realistic estimate.

At Second Canyon, the nonlocal group may have been a single extended family, and almost certainly was no more than two separate households. At this site, the new arrivals remained separated from the rest of the residents throughout the subsequent occupation—even though the entire settlement was enclosed by a single wall.

Many questions still beg for answers: How did these different groups of people manage to get along with one another, at least for awhile? How did they adjust to making a living in a new area? Did they adopt new religious practices, or did they intensify their beliefs held previously? These are fascinating questions. They are not simple to answer, but our understanding of the archaeological record and how to interpret it is clearly growing. In addition, by Classic period times the archaeological record and the oral traditions of Native American communities have more overlap.

Our survey data suggest that the platform mound system on the San Pedro was part of a larger development whereby mounds were constructed in a number of areas outside the Phoenix Basin at roughly the same time. A number of our surveyed sites show a continuous progression during the Classic period from pithouse settlements to compounds to platform mounds. Some immigration to the platform mound sites may have occurred, but it was likely on the scale of a household or two, similar to Second Canyon. The strong evidence for mi-



*Charles C. Di Peso's interpretive sketch of the Reeve Ruin. Di Peso argued that the residents of this site were immigrants. Illustration courtesy of the Amerind Foundation, Inc., Dragoon, AZ.* 

gration is in a much more limited area just south of platform mound the distribution. Having gained new insight into the probable scale of Classic period migration to the San Pedro, future research will focus more on the local environment, rates of population growth. and other internal factors that can help account for the distinctive settlement system that developed here over time. It is a fertile field of study, not likely to be exhausted soon.

## A Survey in the Saguaro National Park

By Kevin D. Wellman, SWCA, Inc.

Saguaro National Monument made headlines in 1994 when it became a national park. The monument was established east of Tucson in 1933, and in 1961 a second unit was added west of Tucson. Together, these units protect some of the densest stands of saguaros in the Sonoran Desert. More land has been added as areas are threatened by development. The monument's new status as a national park is expected to result in increased visitation and national visibility.

In the spring of 1994, archaeologists from the Western Archeological and Conservation Center (WACC) surveyed 740 acres within two areas inside park boundaries—one within the Rincon Mountain District boundary expansion area and the other within the Tucson Mountain District, which receives heavy visitor traffic. This baseline survey sought to identify the location, date, and function of archaeological sites present on Saguaro National Park property.

#### **Rincon Mountain District (RMD)**

A boundary expansion in 1991 added about 4,000 acres to RMD on the north side of Rincon Creek. The 1994 survey in RMD was the first step towards completing the cultural resources inventory of the recently acquired lands.

Sites recorded this field season in RMD include five small to moderate-sized Hohokam artifact scatters, two residential sites, and one moderate-sized agricultural site that probably includes a residential component. Although the sites are in good condition and limited evidence of pothunting is present at only one site, identifiable decorated sherds are sparse across the project area. This lack of diagnostic materials makes it difficult to date the sites, but six have been tentatively associated with Late Colonial to Early Classic occupations of the Rincon Valley. These include Late Colonial/Early Sedentary components on both of the residential sites and a Sedentary occupation at the agricultural site.

The Rincon Valley saw some of the earliest expansion of historic settlement out of Tucson. Settlers arrived about 1870, after Apache raiding ceased. Despite this long history of Euro-American occupation in the Rincon Valley, historic remains in the RMD project area are limited to two small mining test excavations found near the ranching-related Hope Camp.

#### **Tucson Mountain District (TMD)**

The survey in TMD included 380 acres of land near Contzen Pass. The largest artifact scatter in the TMD project area has both a large Late Archaic and a smaller Hohokam component. A Late Archaic projectile point was recovered from the surface of this site. The remaining five artifact scatters



In 1994, WACC archaeologists surveyed two areas within the current Saguaro National Park boundaries.

are much smaller and could be dated only to the Hohokam period. Two petroglyph sites, one depicting a lizard, were found on exposed bedrock in a wash, near the large petroglyph site known as Picture Rocks.

Historic sites in the TMD project area include a portion of the Old Yuma Mine and two smaller mining sites. Mining in the Amole Mining District (covering the Tucson Mountains) was sporadic and largely unsuccessful, driven as much by speculation as by production. In 1885, the original claim was filed on the Old Yuma Mine. Extensive exploratory work with little production proceeded until 1916 when the main shaft had reached a depth of 300 ft. A mill was built at the mine site in 1916, and limited mineral production, dominated by lead, continued until 1926. Sporadic activity, including production of dump ore, surface material, and crystal mineral specimens, continued at the mine through the mid-1980s.

Two smaller historic sites are located in the area of the Old Yuma Mine—an encampment approximately 100 m downslope from the mine and two building platforms with residential and mining trash, located 150 m west of the mine. The encampment dates from about 1915 to 1920, and the trash scatter dates from circa 1920 to 1935. It is unclear if this last site is a habitation site or another mining locale. Many abandoned roads and horse trails also found in the project area probably date to the early days of mining in the Tucson Mountains.

#### Saguaro Sites

Examination of a small portion of Saguaro National Park indicates that people utilized the area during the Late Archaic, Hohokam, and Historic periods. During the Late Archaic period, people probably hunted in the area. Hohokam sites include residential villages and agricultural fields. During the historic period, mining and ranching took place. This survey, as well as future ones, expands our knowledge of Tucson Basin archaeology and will assist park staff with management decisions about land and resource preservation and public use.

Mr. Wellman conducted the Saguaro National Monument 1994 survey while employed by WACC. Project director Susan Wells, WACC staff archaeologist, coordinated the survey. Center for Desert Archaeology Archaeology in Tucson 3975 North Tucson Blvd. Tucson, AZ 85716



A Late Archaic projectile point was discovered at a large artifact scatter site in the Saguaro National Park (see story on page 7).

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Assistance in mailing the last Newsletter was provided by Jean Reid and Irina Hynes.

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