

ARCHAEOLOGY IN TUCSON

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EXCAVATIONS AT LOS MORTEROS

The heat wave of May and June has made the task of uncovering prehistoric pithouses at Los Morteros much more difficult than usual, but an intrepid crew of 15 has labored on despite the heat. The productivity of the site, with many burned houses with artifact assemblages on the floor, has certainly been a stimulus for the archaeologists. So has the large number of houses at the site. Over 250 pithouses have been identified in trenches. The shell pendant illustrated below is one of the most interesting complete artifacts found to date.



Carved shell pendant recovered from an Early Rincon (AD. 950-1000) pithouse at Los Morteros. Resembles Mexican mythical monster, cipactli, "the crocodile," or possibly a roadrunner.

Los Morteros is located near the north end of the Tucson Mountains. The south end of the site where excavations are currently concentrated dates to late Rillito through late Rincon times, roughly A.D. 850-1150. Funding for this project is provided by the American Continental Corporation. When completed, this project will make a major contribution to our understanding of the prehistoric Hohokam culture.

Because the site is so large and there are so many buried houses, it would be impossible to excavate everything. Therefore, a research plan that asks a series of questions about the organization of Hohokam villages is being used to guide the fieldwork. For example, several miles of backhoe trenches have been excavated in order to reveal the full pattern of the distribution of houses within the site. A backhoe with a 5 foot wide bucket is then used to strip off the soil from the plow zone that overlies the houses that are selected for excavation. Los Morteros was once a plowed field, so the upper soils are highly disturbed.

Frequently, the backhoe is able to expose the full plan of a feature, so the archaeologist has a good idea of the size and orientation of a pithouse before hand excavation begins. Most of the houses are only partially excavated. This insures that we have a sample of the artifacts from a structure, and it saves a great deal of time over full excavation. For some houses that are judged to be highly productive, the full structure is excavated.

The volunteer program is helping to save field time and to gather more information from houses with floor artifacts. Every other Saturday we have been excavating houses that the regular crew had insufficient time to complete. As an example, one of these houses was a storage room before it burned. The house was very large—roughly 15 by 20 feet—and a test unit had yielded nearly a dozen crushed vessels in an area slightly under 10 by 10 feet. Many of the pots were full of burned corn, beans, and tansy mustard, important foodstuffs for the Hohokam. A large storage pit, over 3 feet deep, was located just inside the entryway, roughly where the hearth should have been in a residence.

The pithouses form part of a larger pattern. The houses group together in large clusters that are 150 to 200 feet in diameter that we refer to as village segments. The same kinds of units occur repeatedly across the site, with at least 10, and possibly as many as 15, present in the southern portion of the site where we are now working. Each village segment appears to have had its own cemetery, and most had a large cooking pit called an *horno*. It is likely that the residents of a village segment were related through kinship, but that is hard to prove archaeologically. At a minimum, they probably represent a group of people that lived and worked together within the village. This is the first excavation in the Tucson area that has been on a sufficiently large scale to allow us to identify and study groups on the village level.

The next step at Los Morteros is to move to the north end of the site, where our work will focus on the period between A.D. 1100-1300. Look for a report from the north in the next newsletter.

TUCSON BASIN ARCHAEOLOGY

FROM THE ARCHAEOLOGIST'S NOTEBOOK

In the last newsletter we quoted from Ellsworth Huntington's 1910 description of the Los Morteros Site. Huntington, a geographer from Yale University, also visited a large ruin on the west side of the Tucson Mountains, just a few miles from Los Morteros. He called this site Shakayuma, based on the local name for the area "charco de las Yumas," which means "water hole of the Yumas." The site is now referred to as the Huntington Ruin by local archaeologists, and these notes from Ellsworth Huntington's field journal make it clear that it was a large Hohokam village. This lengthy description is relevant to Los Morteros, and it also illustrates very well the process of developing multiple hypotheses and then evaluating them with available information.

Friday, March 11, 1910. In P.M. rode in automobile with Dr. MacDougal [Director of the Carnegie Desert Laboratory] 17 miles northwest to old ruined Indian village at Shakayuma, and made dry camp there.

Shakayuma Ruins. Elevation about 2000 feet. Evidently the village was not ephemeral, for the pottery strews the ground in many places so thickly that one cannot walk without stepping on it, and over a large part of the area it occurs in almost every square rod. It is thickest along a central belt running thru camp. Dr. MacDougal found a place where someone has dug down about 2 feet. The pottery is thick clear to the bottom. As Dr. MacDougal put it, it seems as if one fourth of the material is pottery. He also found what looks like an old water-hole or charco, now dry.

Structural ruins are not found in most of the village, but at the northeast end nearest the main water supply there are a number of groups of disarranged foundation stones. This suggests that after the main village was abandoned there still was a small village.

Saturday, March 12, 1910. Spent A.M. at Shakayuma ruins, and got back to Tucson at 2 PM.

The structural ruins consist of rows of stones 1-2 feet in diameter set up on end in parallelograms, and not greatly disturbed in some cases. They are scattered around at intervals of 100 feet or so. They occupy the SE part of the town and the NE projection and cover a space 2000 feet long from NE to SW and half as long in other direction. Their number may be a hundred or so.

So far as today's map goes the area where pottery is thick in Shakayuma amounts to about .0315 square miles or 202 acres, and the area where one finds it wherever he looks, but not so thickly as in center of village amounts to 0.64 square miles or 410 acres, which includes the previous 202. These are minimum figures because our mapping was far from complete, and of course much pottery has been buried especially along the playa-like edges. If we suppose the very liberal amount of half an acre of land or 180 feet square for each house in the main village and an acre or 200 feet square for each house in the less thick portions we have a population of 600 families.

The question is: Would the Indians, or anyone else, ever locate a really big village in such a dry spot, when they might just as well have put it a few miles upstream near permanent water? Possible hypotheses:

1) The Indians gathered in a large village for the sake of protection, and chose merely a site where they could all gather. The difficulty with this is that the site is not at all adapted for the purpose.

2) The village was agricultural and depended for a livelihood chiefly on the abundant beans and corn which can be raised by the summer rains. This they eked out by hunting rabbits etc. and by raising winter crops in good years. Probably, no matter what may have been the state of the water supply, a large portion of the inhabitants did not depend upon the limited area of playa or river-bottom land in the immediate vicinity, but went off to temporales [farming plots] in the playas at considerable distances in the season of summer rains. In seasons when these rains failed they must have depended on the beans of the mesquite, provided these bear a good crop in dry years, the fruit of sahuaro (sic), and of other cactuses, or the nuts of the piñon pines in small areas high in the mountains 20 miles away. Perchance, like the modern Moquis [Hopi], they stored up food for 5 or 6 years in advance. So far as food was concerned, we may grant that the village might have supported itself.

Now as to water. The theory under discussion holds that, then as now, the Santa Cruz was dry at this point except in the summer season of floods and years of exceptional rainfall. Either the women carried water a mile or two across the hills, or the inhabitants relied on "charcos" or pools. We saw two small charcos. Both are small and lie in the plain away from any stream beds and both are today wholly dry.

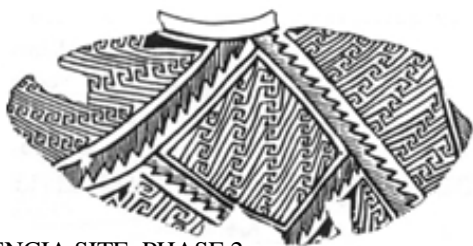
[see Archaeologist's Notebook on page 3]

MEMBERSHIP NEWS

THE GUNSIGHT MOUNTAIN SURVEY

Allen Dart, Tom Preston, and a crew of volunteers have been surveying around Gunsight Mountain at the northwest corner of the Sierrita Mountains since late May of this year. To date they have covered about two square miles and 37 new sites have been recorded.

Additional, much needed cash contributions to support that survey have been received recently from Citibank (\$200), Van's Exxon Service at Mission and Ajo (\$200), and the Tucson Community Foundation (\$500). Donations of \$200 were received earlier from Pima Savings and Holmes Tuttle Ford. These contributions help to match the \$10,000 Survey and Planning grant that was awarded to the Institute by the State Historic Preservation Office. Thanks to all of these contributors.



THE VALENCIA SITE: PHASE 2

The fence around the Valencia site has been highly effective so far in keeping out the pothunters. The true test will come this Fall with the cooler weather.

In response, we will initiate a six week program of mapping and backfilling of potholes. We will work every other Saturday from 8 A.M. to 2 P.M., beginning on September 24. We can use up to eight volunteers per weekend, so if you are interested in participating, please call Jennifer at 622-6663. This is the general activity plan:

- Week 1 Clean up site and begin pothole inventory
- Week 2 Complete pothole inventory, initiate mapping
- Weeks 3-6 Pothole mapping, pothole backfilling

VALENCIA FENCING CORRECTION/UPDATE

The name of Lynn Baker was mistakenly omitted from the list of contributors to the Valencia Fencing project. In addition, a corporate contribution from Judith Abrams and Associates Public Relations was received after the last newsletter was sent out. Our thanks to all of the contributors and to Fairfield Communities for their leadership role in this important preservation project.

VALENCIA MONITORING: THANKS!!

Thank you Marty and Jackie Brehency for all of the visits that you made to the Valencia Site over several years. And thank you Barry Perron for the intensive monitoring effort that you have undertaken. Barry has made almost daily visits to the site for much of the past year. This vigilance is essential to the preservation of this important site.

MEMBERSHIP TERMS

Please note that contrary to what the application form has stated in the past couple of newsletters, membership runs for 11 complete months from the time that you submit your application. Unlike last year, when we depended on Newsletter announcements as renewal reminders, you will receive a Dues Statement by first class mail this year.

The upper right corner of your mailing label shows the month that your membership expires. If there are any questions about your membership, please call Jennifer at 622-6663.

ARCHAEOLOGIST'S NOTEBOOK (continued)

- 3) A third theory is that old springs or sources of water existed, but have now been concealed. But how conceal so large a body of water from trees?
- 4). Possibly the Indians had systems of dams or canals, or tunnels better than those of today.
- 5) Perhaps the village was not large after all, but appears so simply because, first one part and then another was occupied. But why move so far away from water?
- 6) The climate may have changed.



The Institute for American Research is a private, nonprofit, research and educational organization that specializes in the archaeology of the Tucson Basin and southern Arizona. *Archaeology in Tucson* is the membership program of the Institute for American Research, and the AIT Newsletter is published quarterly. The Institute offices are located at 245 South Plumer, Suite 14, Tucson, AZ 85719. Telephone: 602-622-6663.

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