THREE PLANTS FOR THREE CULTURES
THROUGH THREE MILLENNIA

By Michael W. Diehl, Ph.D.

If you want to end a conversation quickly, when somebody asks you what you do, tell them you are a "paleo-ethnobotanist." If your guest is an archaeology enthusiast, wax poetic about the charred, bubbly, vaguely mucilaginous-seeming and singularly unesthetic-looking hunk of an Osage orange (Maclura pomifera) brightly illuminated under your microscope. If your guest has not fled in search of photogenic pots to ogle, she may be interested in why this strange-looking hunk of fruit is an unusual find in an archaeological sample from Tucson.

“What were people doing with that plant” is the most common research question with which paleobotanists routinely deal, and it often put us at the leading edge of archaeological inquiry. In my opinion, asking and answering, as best I can, challenging anthropological questions about prehistoric plant use is the best part of my job.

In the eight years that I have studied plant remains from Tucson archaeological sites, I’ve explored questions about plant use through three millennia of settlement in Tucson.

Continued on page 2
At the invitation of the Old Pueblo Archaeology Bulletin, I have the opportunity to write to what amounts to a captive audience about some of the questions that have made my research fun. This essay provides a brief "whirlwind tour" of three plants — Zea mays (maize), Triticum aestivum (wheat) and Machaerium pomifera (Osage orange). These plants are in some ways emblematic of three cultures that lived in the Tucson region from at least 1200 B.C. through A.D. 1900—roughly three millennia. These cultures include the ancestors of the prehistoric Hohokam, whose occupations are collectively called the "Early Agricultural Period" (1200 B.C. - A.D. 150), the colonial Spaniards (1700s and early 1800s), and high-status Mexican Americans living in territorial Arizona during the late 1800s.

Maize During the Early Agricultural Period

Archaeologists constantly wonder why prehistoric people took up the business of farming. For many years, most scholars assumed that farming was superior to hunting and gathering, because foragers (people who hunt and gather) generally lacked stored foods, and must surely have suffered endemic food shortages. In the 1960s, however, anthropologists began to take a closer look at the few remaining foragers and they made several observations that falsified the assumptions provided by conventional wisdom. It turned out that foragers tend to work about half as hard for their food as do farmers, except where development has displaced them into very inhospitable places. Foragers tend to enjoy better nutrition than farmers, this observation has been repeatedly substantiated by studying the bones of prehistoric foragers and farmers worldwide. When hard times struck, foragers usually moved to places where the pickings were better. Even in good times, farmers experience higher incidents of disease and malnutrition, and hard times for them often meant famine and death. Given all that, why would any person in the distant, prehistoric past make the transition from foraging to farming?

It turns out that in the Tucson Basin, the answer is that the transition from foraging to farming was, at first, not much of a transition at all. The switch to primary dependence on farming happened at such a slow pace that it is unlikely that anyone was aware that it was occurring. It began with the introduction of maize some time prior to 1800 B.C. and continued through A.D. 150. Most archaeologists call this interval the Early Agricultural period. It might as easily be called the Late Foraging period, because the earliest farmers along the Santa Cruz River floodplain made extensive use of wild plant foods.

A typical Early Agricultural Period site provides evidence of 20 to 40 different plants, including many wild grasses, mesquite, several varieties of cactus, a host of weedy flowering plants, and a variety of more common floodplain-favoring plants such as goosefoot and tansy mustard. In contrast, a typical tenth-century A.D. Hohokam site will have 7 to 15 taxa, of which roughly half will be varieties of maize, beans, squash, or cotton, the rest are usually cactuses (saguaro or prickly pear), mesquite, goosefoot, and tansy mustard. In short, Early Agricultural period farmers were much more like foragers than their Hohokam successors. I like to use the term "farmagers" to describe the lifestyle of the Early Agricultural period people living along the Santa Cruz River and to distinguish their lifestyle from that of the more agriculture-dependent Hohokam.

Knowing that the earliest farmers were not sedentary agriculturists helps us to understand why they began to farm in the first place. Here we return to the discussion of the maize plant itself. It seems likely that the quality of the maize grown during the Early Agricultural period would not impress any modern farmer. Based on the measurements that I have obtained on cob fragments and cupules (an anatomical structure of the maize cob), I think I can describe the appearance of the earliest maize. Imagine a cob the size of a well-used yellow pencil, studded with corn kernels roughly the size of the pencil's eraser. The cob would be perhaps two to three inches in length, a quarter-inch in diameter, and would yield a few dozen small grains. Where modern Pueblo maize yields 500-2,000 kilograms of grain per hectare under cultivation, this early stuff rarely topped 300 kg/ha, despite the fact that Early Agricultural period farmagers attempted to maximize their harvests through the use of irrigation.

"Why bother with it at all?"
remains the partly-answered question. The Sonoran Desert is, after all, well-known through the auspices of scholars like Gary Nabhan, as an area with a bounty of edible wild foods. Here the research of ecologists, range managers, anthropologists, and experimental archaeologists are all sources of information to help us understand what, exactly, the wild resources provided. Most of the wild foods were limited in one or more ways. The cactus fruit and mesquite pods, for example, offered respectable harvests, but they required substantial amounts of effort to find, harvest, and process. Saguaro is only available for a limited window of time, and there is a lot of competition from birds and animals. The wild grain plants like goosefoot and tansy mustard offered weak harvests at best, and they too required substantial amounts of effort to harvest and process. Wild grasses were the worst of the lot. They only provided a few calories more than the effort expended to collect and process them.

The earliest Tucson maize must have looked very good in comparison with the seeds of all other wild plants. Equally importantly, it was predictable. You knew where and when you planted it, so you knew where and when (more or less) it would be available to harvest. In a world where finding and acquiring resources was a time-consuming and competitive endeavor, maize slightly increased the predictability of the overall food supply. Maize farming was balanced by augmenting the food supply with a wide variety of wild, edible plants. Although maize was “the best thing going” at the time, crop yields were not high enough, and storage technology was not safe enough, to provide enough food to sustain the tiny communities that made the effort to grow it.

Maize yields remained very low and the farming economy remained stable from 1800 B.C. through A.D. 150. After 500 more years of technological change, substantial dependence on crops finally became prevalent during the earliest Hohokam occupations around A.D. 650. By then it is doubtful that oral traditions handed down through the generations could recall the days when maize farming was not part of the cycle of the seasons. In the end, the “transition to agriculture” in the Tucson Basin is best thought of as a very slow process that would not have struck anyone, at the time, as being particularly revolutionary or otherwise profound.

Maize, beans, squash, peppers, and cotton eventually became staples in the prehistoric diet, and people largely moved away from wild plant foraging to intensive farming. Native American economies remained focused primarily on New World crops until the arrival of the Spaniards. These new emigrés spurred a second agricultural revolution by introducing a variety of new fruits and, most importantly, a new grain crop—wheat. Indigenous peoples embraced wheat because it allowed double cropping, with maize providing the first harvest and wheat providing a second harvest.

Spaniards and Wheat in the New World

Although Native Americans received Eurasian wheat enthusiastically, colonial Spaniards were not, for their part, very enthusiastic about maize. Wheat held a special place in their esteem. Despite frequent provisioning problems, Spanish colonists used maize only reluctantly. As John Super noted in Food, Conquest, and Colonization in Sixteenth Century Spanish America, and Jeffery Pilcher in ¡Que Vivan los Tamales! Food and the Making of Mexican Identity, the consumption of wheat became an important element in Spanish identity in the New World. Maize was held to be the food of the lower classes and people of indigenous ancestry. Consuming wheat products and other Iberian foods was one way for high-status Spaniards to display their wealth and status, and to maintain
identities distinct from the populations that they ruled.

Super's and Pilcher's research efforts concentrated on documents -- letters, bills of lading, and communications between Mexico and Spain. Their findings are supported for the colonial Spaniards in the Tucson Presidio. James Bell was an American traveling west to California who passed through Tucson in the 1840s, and he kept a diary of his travels as was the fashion of the time. His diary, excerpted below, with original spellings as he wrote them, shows that wheat was the food served to honored guests. Maize was not on the menu.

Through the favor of Mr. James I dined with the comandante. Our first dish was rice cooked with some ingredients to make it palatable, and Chili Verde (green pepper) in a separate dish, but to eat together, second was Beef, Squash, Quinces, whole Peppers, Green Beans, cooked separately, but all on the table in one dish; third, dried beans, and Pepper to eat with them; for, desert, boiled flour Pudding with almonds in it, and Peach Marmalade for sauce.

... The thin and well baked flour [i.e. wheat flour, emphasis added] Tortilla, common to this country, accompanied the meal.

My analyses of flotation samples from recent archaeological excavations at the sites of the Tucson Presidio and the Convento are consistent with Super's research and Bell's diary. Maize is not as common as I would expect in these samples if colonial Spaniards had made use of the same suite of foods as Native Americans. Wheat, however, may be found in most of the samples, along with peach pits -- another Iberian introduction looked upon with favor by colonists and Native Americans alike. Since maize was unquestionably grown by the Spaniards' Native American contemporaries, it seems unlikely that colonists did not have access to maize.

Tucson's presidio garrison apparently also thought that wheat was emblematic of status and ethnic differences between colonial Spaniards and Native Americans. Lest we think of the Spaniards, however, as unduly provincial, consider the case of the California volunteers during the American Civil War. According to Tucsonan George Hand's diary, several members of the company died of scurvy -- extreme vitamin C deficiency. Had the victims been a little less refined about their preference for beef, beans and wheat, they might have avoided illness entirely. Cactus fruit, chiles, and tomatoes, along with various wild greens used by local Native Americans, were good sources of vitamin C.

Osage Orange and Mexican American Corrales

By 1880, new arrivals from the rest of the United States began to arrive in Arizona in large numbers. Immigrating European Americans and high status Mexican-Americans shared the preference for wheat rather than maize products. Pima County agricultural statistics from the late nineteenth century, for example, show that wheat and other Old World grain crops were commercially farmed in much greater quantities than maize, even though maize had evolved, through selective breeding, into a plant that routinely out-produced (yield per unit of land) all Old World grain crops.

Despite the shared and increasing preference for wheat, many Mexican-American customs set Tucson's established Hispanic community apart from the growing Anglophone community. One of these was the backyard garden or corral. A typical upper class household's corral included one or more flowering fruit trees, a grape arbor, a vegetable patch, and a wide variety of decorative ornamental plants. These gardens, to the extent that the owners maintained truly exotic plants in good health and bright display, may have brought prestige to the owners in addition to providing shade and a pleasant view.

Excavations in the old Leon family homestead in Tucson show that the Leon's maintained a very showy garden. Oddest of the bunch was the Osage orange that yielded the fruit that turned up in their flotation samples. Foodstuffs in the assemblage included wheat, beans, cherries, chiles, coffee, a little maize, nutmeg, oats, peaches, plums, pumpkins, rye, and vine grapes. Animal fodder included clover and sweet clover. Ornamentals and shade trees such as the Osage orange and orchard fruit trees grew alongside manzanita, mesquite, and morning glory. If all of these plants were grown in the Leons' corral -- we knew the Osage orange was, as it was still standing when the site was excavated in 1999 -- their garden must have been quite impressive indeed.

Ongoing analyses of recently recovered plant remains from the Tucson Convento's Mission Gardens, the Tucson Presidio, and from Early Agricultural period houses along the Santa Cruz River...
floodplain will allow me to continue to explore ethnic variation in food preferences, changes in the development of maize, and prehistoric land use habits. Over the next two years, materials recovered in the course of the Rio Nuevo project (sponsored by the City of Tucson) will provide more information with which to address these and other interesting questions by examining the plants recovered from archaeological sites.

About the author: Dr. Michael W. Diehl is a paleobotanist with Desert Archaeology, Inc., in Tucson.

THE OLD PUEBLO ARCHAELOGY CENTER MEMBERSHIP PROGRAM

Archaeology Opportunities is a membership program for persons who wish to support Old Pueblo Archaeology Center’s education programs and perhaps even experience for themselves the thrill of discovery by participating in research. Members get to participate in archaeological excavation and survey projects and can help study and reconstruct artifacts in the archaeological laboratory. Benefits include:

★ Opportunities to participate in Old Pueblo Archaeology Center’s public excavation up to 10 days per year, and in Old Pueblo’s other archaeological digs, surveys, and research programs.
★ Invitations and discounts for field trips, classes, and other archaeology events.
★ A 20% discount on Old Pueblo Archaeology Center’s publications, merchandise, and most courses.
★ A 1-year subscription to the Old Pueblo Archaeology quarterly bulletin with its illustrated updates on archaeology news and events.

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| □ Contributing                                                 | $200
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| □ Sponsoring                                                   | $1,000 Subscriber ($10): receives one year (4 issues) of Old Pueblo Archaeology bulletin but no other discounts and no excavation opportunities |
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Membership categories provide annual subscription to Old Pueblo Archaeology and opportunities to excavate in Old Pueblo’s public research programs at no additional cost, plus.

RECENT GRANTS AWARDED TO OLD PUEBLO ARCHAEOLOGY CENTER

Old Pueblo Archaeology Center would like to thank the recent awards towards the educational program. These awards have made our archaeological program promoting preservation and heritage of southern Arizona more accessible to children and the public. Old Pueblo Archaeology Center thanks the Arizona State Parks for their Heritage Preservation Fund grant to the Town of Marana for expansion of Old Pueblo’s Marana District Park heritage program, and the Community Foundation of Southern Arizona, Wells Fargo, and Fry’s Food Stores for their support of our OPEN1 children’s programs.

Old Pueblo Archaeology Center would like to thank the Arizona Humanities Council for the support of three programs (listed on pages 10-11) this spring: “Arts and Culture of the Ancient Hohokam Indians,” Ancient Native American Pottery of Southern Arizona,” and “Apache Culture Kit.” Thanks, AHC!
Interim Report for Ongoing Analyses at the Dairy Site  

by Jeffrey T. Jones

The last decade of the twentieth century produced some surprising and exciting discoveries in the Tucson Basin. Deeply buried cultural deposits found in the Santa Cruz River floodplain revolutionized our view of prehistoric subsistence and settlement patterns during the Archaic period between 2000 B.C. and A.D. 200. These archaeological discoveries demonstrated that the shift from a nomadic hunting and gathering lifestyle to a more sedentary occupation with irrigated corn agriculture began much earlier than expected in southeastern Arizona, maybe even as early as 2000 B.C.

During May and June 2002 Old Pueblo Archaeology Center conducted archaeological data recovery excavations at a portion of the Dairy site, AZ AA:12.285 (ASM), where the Town of Marana is currently widening and realigning Cortaro Farms Road immediately east of Interstate 10. Old Pueblo’s excavations resulted in the discovery of 233 prehistoric features including 2 pithouses, 18 outdoor cooking areas, 1 canal, and 212 outdoor pits, all located in three discrete cultural levels. One hundred and ninety of these features were excavated.

The uppermost cultural level, Level 1, was located approximately 1.53 m below the ground surface and included 3 outdoor surface features, 1 bell-shaped pit, and 1 canal. The outdoor work surfaces appeared to be little used but had cooking pits and a few postholes. It is possible that these features may have been ramadas or other types of shelters used by people tending nearby crops.

Cultural Level 2 was found at an average elevation of 3.18 meters below the ground surface, and included 1 outdoor surface feature, 4 resource processing pits, and 4 storage pits. Three storage and 2 processing pits were clustered in a discrete area near the southern edge of the investigated area. The remaining three pits and the outdoor surface were scattered across the northern area but all nine features were within 50 meters of each other.

The deepest cultural level, Level 3, was located approximately 3.56 m below the current ground surface and contained the majority of features found during Old Pueblo’s fieldwork. Features include 203 pits of various configurations, 14 outdoor activity areas, and 2 habitation structures. One hundred-sixty of these pits were excavated. Six projectile points manufactured during the San Pedro phase of the Late Archaic period were found during excavations at Level 3, suggesting the area was occupied between 2000 and 800 B.C.

The two habitation structures found at the Dairy site were small, oval houses constructed in shallow pits only 4 to 5 cm deep. House Feature 236 had a packed earthen floor, 11 postholes in a semicircular pattern, 2 floor pits, and 1 burned area where a fire was built on the floor. A preserved burned section of wall indicated that the house was constructed of a lattice of thin poles with grass thatching. Samples of this wall material were sent out for analysis so we should be able to tell what types of wood and grass were used in the construction.

House Feature 361 first became visible as eight postholes in an oval pattern in what appeared to be sterile alluvium northeast of pithouse Feature 236. Excavation of the area revealed an unprepared floor with patchy areas of oxidation and two shallow pits but no hearth. The floor was beneath a 10 to 11 cm thick lens of alluvium that continued outward beyond the structure. The fact that the postholes were visible above the alluvial lens indicates the structure was inundated and the silt lens deposited while the structure was still standing.

House Feature 361 was located immediately northeast of house Feature 236 but was stratigraphically 8 cm lower, suggesting it was abandoned before Feature 236 was constructed. No evidence of floor or wall plaster or burned daub was found in either house and both appeared to be

Food grinding tools. These food grinding tools (metates and mano) were found during excavations at the Dairy site. The mano may have been used with both metates. Photograph by Courtney Rose.
temporal shelters.

Analysis of pit features at the Dairy site has provided some preliminary information on the occupation of the site. Although 160 pit features were found at Level 3, only three appeared to be constructed for storage purposes. This suggests that the Level 3 occupation was focused on processing resources but that these resources were either consumed immediately or transported elsewhere for storage and later consumption. By contrast, four of the eight pits from Level 2 were storage pits suggesting resources were being processed there for future consumption. The apparent increase in storage facilities through time may indicate a shift toward a more sedentary occupation associated with maize agriculture. However, maize pollen was not found during analysis of pollen samples from the site so at this time it is unclear whether maize was being stored in the Level 2 pits. Analysis of burned preserved botanical materials from pits and other features at the Dairy site is in progress. These burned botanical remains will provide material for radiocarbon dating of the occupations and important information on which plants were being processed and perhaps grown at the Dairy site.

OLD PUEBLO STICKER DESIGN CONTEST

First Prize design wins a beautiful silver pendant created by jeweler and archaeologist Barbara Murphy.

We are looking for an innovative design for a window-decal type sticker that can represent Old Pueblo Archaeology Center. We encourage all interested Old Pueblo members to submit their design ideas. The staff of Old Pueblo will choose the design that will be used on stickers to be distributed to our members in the coming year. The deadline for all contest entries is May 30, 2003. The winner will be decided in June. For more details call Old Pueblo at (520) 798-1201.

Would you like to subscribe to Old Pueblo Archaeology?

If this issue came to you with an address label showing a “Paid through” date that is earlier than 20030630 you will need to subscribe or become an Archaeology Opportunities member to receive future issues. See page 5 for subscription and membership information.

Old Pueblo Archaeology Center has free Arizona Archaeology Awareness Month posters celebrating Arizona’s beautiful rim country. Stop by our office for your free poster!

Volunteer Spotlight: Gail Roper

Gail Roper has been interested in archaeology since she was a child. However, she decided to excavate at an archaeological site in 1996 when she saw an advertisement for Old Pueblo Archaeology Center’s “Dig for a Day” at the Sabino Canyon Ruin with former Educational Project Director, Sara Chavarria. Since then, she has been a member of Old Pueblo and an avocational archaeologist volunteering her time and talents to educational programs.

Over the years, Gail has shown her commitment as a volunteer for Old Pueblo in many ways. She has served on the board of directors, volunteered as a crew chief at the field school, helped to implement OPEN1, (the mock excavation site for the children’s program), and constructed educational tools.

Gail’s enthusiasm for archaeology is contagious. She states that one of the most important goals of archaeology is preservation of the Southwest’s history and that education is the primary method for teaching people about preservation.

Volunteer Spotlight on Gail Roper. Gail Roper (center) assists Presidio High School students Valerie Quast and Amber Fox how to identify artifacts in the screen at the Yuma Wash site. Photograph by Barbara Hill-Flajnik.
Gail sees one of her missions as coming up with new and creative ways to capture people’s attention and promote a higher awareness of Arizona’s past and the necessity of preservation.

Some examples of Gail’s contributions to education are the miniature and larger scale replicas of Hohokam dwellings she has created for Old Pueblo (See photograph of two examples of her replicas on page 11). Six years ago, Gail started to research the topic of Hohokam architecture. She spent six months researching Hohokam pithouse construction techniques before she started creating miniature replicas of different Hohokam house styles for the education programs at Old Pueblo.

Gail’s pithouse and pueblo-like Hohokam house replicas have been used by Old Pueblo instructors for a number of different educational purposes. They are brought into the classroom and even onto archaeological sites. Gail initially created these replicas as a starting point to get the public (children and adults alike) interested. She meant them to be thought provoking and to get people to start talking about ancient architecture and preservation. She also would like students who examine these replicas to question the validity of the representations as she notes, “I have never seen two pithouses that were identical.”

These Hohokam house replicas have become absolutely essential teaching tools for the instructors at Old Pueblo. They enable students of archaeology to imagine how the Hohokam may have lived. They jump-start the thinking process about how ancient houses may have been constructed and what they look like in the ground today, centuries after they were abandoned.

Gail also uses her replicas as an example of how important note-taking and field records are for the preservation of the past. She notes that if Hohokam archaeologists did not keep such meticulous and detailed records, she would never have been able to construct replicas of prehistoric houses with such attention to detail.

Nowadays, Gail is working on a number of different educational projects. She is drawing scenes of everyday life as they might have been among the Hohokam, creating replicas of ancient stone tools, and volunteering as crew chief at the Yuma Wash site. Recently, Gail volunteered to be a crew chief for our Presidio High School archaeological program. This experience was meaningful to both Gail and her students.

Although Gail maintains a full schedule while raising her two children, with her profession as a dog agility trainer, and volunteering, she hopes to one day have the opportunity to attend college. Gail is interested in learning even more about ancient architecture and would like to explore theoretical perspectives on the processual development of different ancient cultures around the world.

Old Pueblo is very fortunate to have the help of such an innovative, energetic, and multi-talented volunteer.

Thank you Gail!

Discovering Archaeology Today: Presidio High School’s Science and Math Program

This past fall, Old Pueblo Archaeology Center conducted an eight-week archaeological program for Presidio High School’s math and science students. Old Pueblo’s Educational Project Director, Dr. Courtney Rose, directed the program with assistance from Presidio High School’s education staff, Tom Drexel, Barbara Hill-Flajnik, Steve Guerrero, and Scott Duerstock.

The fieldwork sessions of the program were enriched by Old Pueblo’s crew chiefs, who worked with the students in teams. The crew chiefs that participated in the program are Steve Stacey, Gail Roper, Jim Trimbell, Dorothy Ohman, and Robert Pischer. A warm “thank you” goes out to the crew chiefs for being such motivational team leaders in the field!

Through a combination of group projects and lectures in Presidio’s science laboratory and two days of field work at the Yuma Wash site, the Presidio High School students learned basic archaeological concepts, stratigraphy, dating techniques, artifact analysis, ethics, and basic archaeological field methods. The students seemed to really grow from the experience. Old Pueblo volunteer crew chief Gail Roper said that although the students were at first reticent, as soon as they started digging they became quickly engaged in the discovery process. Old Pueblo’s crew chiefs enjoyed guiding
the students through this learning process and describe Presidio High School students as enthusiastic, bright, highly capable, and open-minded. The students absorbed large amounts of information with ease and applied their newfound knowledge with alacrity and confidence.

This semester, two Presidio High School students who participated in the eight-week archaeological program became Old Pueblo's newest interns: Mary (Noel) Englebert and Vanessa Garcia entered into the internship program at Old Pueblo to gain more than just academic credits. They are participating in all aspects of the field of archaeology and are learning by actively taking part in the different archaeological tasks.

The education staff and volunteer members at Old Pueblo appreciate the opportunity to contribute to the education of Tucson’s youth. It is always a pleasure to work with the staff and students at Presidio High School.


Supporters of Old Pueblo Archaeology Center, November 23, 2002 - Valentine’s Day 2003

Volunteers: Sara Cermak, Dominique Coullet du Gard, Jane Delaney, Vanessa Garcia, Noel Englebert, Erin McDonald, Jim “Hawk” Nagle, and Wendell Zips. It spent 179.75 recorded hours volunteering in Old Pueblo's office and lab this period. Unrecorded volunteer hours were also contributed by Fred Farso and Bert Whitley of Gabroy, Rollman & Bossé, P.C., by Old Pueblo's all-volunteer board members (see page 1 - especially Steve Stacey!), by the Old Pueblo Archaeology bulletin mailing team of Carol Richardson, Ciel McPherson, and Bess Puryear, by participants in Old Pueblo’s Yuma Wash site excavations sponsored by the Town of Marana, and by Allen Dart, Christine Jerla, Jeff Jones, Darla Pettit, Courtney Rose, and Diana Weldon.

Donors of dollars, materials, and other services: Recent dollar donors include Dan Arnit, Rosalie Browitt, Arch Brown, Jr, Jim Click, Jr., & Vicki Click, Alex & Madelyn Cook, Donna Cosulich, Allen Dart, Bill Doelle, Jane Ellins, Jim & Mary Faul, Fry’s Marketplace/Kroger Foundation (grant), Arthur J. Jelinek, the Jostens Foundation (grant), Brian Kenny, Doris Rickard, SWCA, Inc. Environmental Consultants, Ray Thompson, John Todd, Richard Ulmer, and Diana Weldon. We’re also grateful to every one who supported Old Pueblo by buying tickets for our March 2003 “Old Pueblo - Young People” fundraising raffle.

Other, noncash contributions were received from Patty & Bert Whitley, who donated a like-new Panasonic 27" color television and a Proscan DVD player to Old Pueblo, and from the following persons and organizations who donated gifts for Old Pueblo to use in fundraising: Jim Walker & the Archaeological Conservancy, the Arizona Inn, Jim Click, Jr. & the Jim Click Automotive Team, Grand Canyon National Park Lodges/Xanterra Parks & Resorts, Al McGinnis & Charity Everitt, the Navajo Nation Hospitality Enterprise, Southwestern Mission Research Center, and the Westward Look Resort.

The on-line newsletter Got CALICHE? (distributed by “SWA” - the not-for-profit Southwestern Archaeology, Inc. www.swanet.org), and the Arizona Archaeological Council (AAC) email listserv both post news about Old Pueblo Archaeology Center’s programs on the web. To subscribe to either news service send your name, address, phone number, email address, and info on your professional or avocational research interests to swa@dogyears.com (for Got CALICHE?) or to John Giacobbe at cerc1@mindspring.com (for AAC listserv).

Supporters include all of Old Pueblo Archaeology Center’s Members and Friends! As of February 14 there were 171 Archaeology Opportunities memberships current, some of which include more than one person on the membership.

We sincerely thank all of these contributors & volunteers and apologize if we have failed to acknowledge other supporters.
March is Archaeology Awareness Month!

The 2003 Arizona Archaeology Awareness Month Statewide Listing of Events is now posted on the Arizona State Parks website www.azstateparks.com/partnerships/shpo/shpo.html. Click on the picture of the “Rim Country—Celebrating Cultural Crossroads” (Arizona Archaeology Awareness Month poster) and you can access a .pdf file that is readable using the free Adobe Acrobat software. Old Pueblo has free event-listing brochures as well as free posters—stop by our office today!

There are a variety of classes, tours, and events to participate in so don’t miss out!

Old Pueblo’s Calendar of Events for Spring and Summer

Recent Excavations at the Yuma Wash Hohokam Archaeological Site is a free, slide-illustrated presentation by archaeologist Dr. Courtney Rose, sponsored by Old Pueblo and the Town of Marana on March 3 at 7:30 p.m. The presentation will be followed by the “Old Pueblo—Young People” raffle to raise funds for Old Pueblo’s children’s education program. The presentation will be held at the Northwest Fire District Training Center, 8165 N Wade Road, Marana (ca. 1 mile north of the Cortaro & Silverbell Rd intersection). For more details call 520-798-1201.

Old Pueblo Archaeology’s Program at the Archaeology Expo

This annual, state-wide event will be held on March 28-29 from 9 a.m. to 4 p.m. This year’s Expo will be in the Green Valley Park along historic Main Street in downtown Payson, AZ.

Joining various Arizona organizations in showcasing the archaeology of Arizona, Old Pueblo will sponsor a hands-on children’s program called The Mystery Culture at our activity booth at the expo.

For more information contact Ann Howard at the State Historic Preservation Office (Arizona State Parks), 602-542-7138 or email ahoward@pr.state.az.us.

Traditional Pottery Making

Experienced southwestern potter and artisan John Guerin teaches Old Pueblo’s pottery workshops. In these workshops you can learn how to make traditional Indian pottery the way it has been made here in the Southwest for over two thousand years. Dig your own clay, then hand-make your own pots, seed bowls, canteens, corrugated ware, ladles, and rattles using the coil-and-scrape method. The paddle-and-anvil method is also demonstrated. All equipment is provided.

Class includes:
- Initial steps forming, shaping, smoothing
- Completing scraping, sanding, polishing, slipping, & painting
- Making canteens
- Making corrugated ware
- Making ladles & rattles
- Field trip to dig clay

Children under 16 may take the pottery class if a parent enrolls with them. Maximum enrollment is 15 persons/class. The pottery class meets at 1-4 p.m. Sundays March 16 through May 4 (excluding Easter Sunday April 20). Field trip is on March 23. The fee is $69 per session ($55 20 for Old Pueblo members) Preregistration is required. Call Old Pueblo at 520-798-1201.

Arrowhead Making & Flintknapping

Flintknapper Sam Greenleaf will offer the popular “Arrowhead Making and Flintknapping” workshop on March 15. Class time is 9 a.m. to noon.

Sam teaches you how to make an arrowhead out of obsidian. In the process you will learn more about prehistoric people by experiencing and studying how they made and used their artifacts.

All necessary equipment is provided. Participation is limited to 11 persons ages 9 and older. Cost is $25 for nonmembers and $20 for Old Pueblo members. Preregistration is required. Call 520-798-1201 to sign up.

Pima Community College
Oasis Center Class
“Ancient Desert Dwellers”

This two-session series will present a close look at the Hohokam and how this ancient society flourished in the desert. Come and learn how archaeologists find out about ancient Hohokam subsistence. Meets 2-3:30 Tuesdays, March 11 & 18, 2003. Call Oasis to register for Class #214: 520-795-3950, ext 2113.

Pima Community College
Hohokam Arts and Culture Class (with Arizona State Museum Trip)

Old Pueblo Archaeology Center’s Executive Director Allen Dart will offer a
3-session (April 2, 9, & 16, 2003) Pima College noncredit class on the material culture of southern Arizona’s ancient Hohokam Indians.

Sessions 1 & 2 will feature slides of Hohokam pottery, artifacts made from stone, seashell, bone, textiles, and rock art, and discussion of what these materials indicate about Hohokam religious practices and social organization. Session 3 will be a field trip to look at Hohokam artifact collections housed at the Arizona State Museum, University of Arizona.

Sessions 1 and 2 meet at the Pima College Community campus, 401 N Bonita Ave; Session 3 at the Arizona State Museum (S.E. corner of Park Ave & University Blvd). Fee is $59. Call 520-206-6468 to preregister. Curriculum no SW294, Reference no 74142E.

Free Slide-Illustrated Presentations Funded by the Arizona Humanities Council

Arts and Culture of the Ancient Hohokam Indians is a free, slide-illustrated, Arizona Humanities Council-sponsored presentation by Allen Dart, with artifact display. This program will be presented at three different locations and times during Archaeology Month (March 2003) by archaeologist Allen Dart. Each presentation includes an artifact display. For more information on this presentation’s content, contact Allen Dart at 520-798-1201 in Tucson or by email at adart@oldpueblo.org. For details about the individual presentation programs the contacts are listed below.

The first March 2003 presentation of this program will be on Saturday, March 8, for the Western National Parks Association at Casa Grande Ruins National Historical Park, 1100 Ruins Dr., Coolidge, 1:00-2:00 p.m. For meeting details contact Denise Shultz at Denise_M_Shultz@nps.gov or phone 520-723-3172.

The second and third “Arts and Culture” programs will both be on Wednesday, March 19. The earlier one that day will begin at 11:30 a.m. at the Tempe Historical Museum, 809 E Southern, Tempe, AZ. For meeting details contact Jim McBride at 480-838-2825 or James.McBride@asu.edu

The March 19 evening presentation of the Hohokam “Arts and Culture” program will begin at 6:30 p.m. at the San Xavier Indian Community at San Xavier District Office, 2018 W San Xavier Rd. For meeting details contact Edward Encinas at 520-294-5727 Ext 3029 or eencinas@sanxavdist.org.

“Arts and Culture” will also be presented on Sunday, September 21, 2003, at the Smoki Museum of American Indian Art and Culture, 147 N Arizona St., Prescott, beginning at 2 p.m. For meeting details contact L John Tannous, Museum Director in Prescott at 928-445-1230 or director@smokimuseum.org.

Ancient Native American Pottery of Southern Arizona is another free, slide-illustrated presentation by Allen Dart. This program will be presented on March 12, 2003 for the San Xavier Indian Community at San Xavier District Office, 2018 W San Xavier Road, at 6:30 p.m. For meeting details contact Edward Encinas at 520-294-5727 ext 3029 or eencinas@sanxavdist.org. For details on the subject matter contact Allen Dart at 520-798-1201 or adart@oldpueblo.org.

Apache Culture Kit, which is also an Arizona Humanities Council-sponsored program, will be presented by Mr. Dale Curtis Miles of the San Carlos Apache Tribe on March 13, 2003, as part of Old Pueblo Archaeology Center’s Arizona Archaeology Awareness Month programs. This free presentation on Apache material culture will be presented at University Medical Center, Duval Auditorium, 1501 N Campbell Ave, Tucson from 7:30 to 8:30 p.m.

Using a trunk of Apache artifacts, Mr. Miles presents traditional Apache culture. The experience is hands-on, leading to an understanding of an often misrepresented people. Since this presentation will be part of Old Pueblo Archaeology Center’s Arizona Archaeology Awareness Month program Mr. Miles will also discuss what kinds of artifacts archaeologists would most likely find at ancient sites used by ancient Apaches. For meeting details contact Allen Dart at 520-798-1201 or adart@oldpueblo.org in Tucson. For information on the subject matter contact Mr. Miles at 928-475-2654.

Tour the Yuma Wash Site—Dig for a Day

Free tours anytime between 9 a.m. and 1 p.m. Or for a $38 instruction and artifact processing fee you can learn about southern Arizona’s ancient cultures by actually digging with archaeologists at this Hohokam village site from 8:00 a.m. - 2:30 p.m. Call Old Pueblo Archaeology at 520-798-1201 to register. Dates: March 6, 7, 8, 20, 12, and 22.

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![Image of a child and an adult, presumably an instructor and a student, engaging in archaeological activity.]

Old Pueblo member and instructor Steve Stacey teaching intern Vanessa Garcia how to map an archaeological feature. Photograph by Barbara Hill-Plajnik.

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