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Hidden Heritage Resources of the Southwest: The Western Archeological and Conservation Center

By Gloria J. Fenner, Lynn Mitchell, James Roberts, Johanna M. Alexander, A. Trinkle Jones, Susan J. Wells, Adrianne G. Rankin, and Jeffery F. Burton Western Archeological and Conservation Center, National Park Service, Tucson, Arizona

In 1952, Congress approved the purchase of a private archaeological research facility, the Gila Pueblo in Globe, Arizona, "for archeological lab and storage purposes" for Southwestern parks and

monuments of the National Park Service. A few years later, in 1958, the government opened the Southwest Archeological Center for business. Its functions included archaeological research, storage and curation of archaeological research collections from the parks, and ruins stabilization.

This article uses the different spel-lings "archaeology" with an "ae" and "archeology" minus the "ae" digraph. Archaeology in Tucson normally uses the "ae" spelling but the federal government does not. Because federal archaeology is the focus of this feature, the "archeology" spelling is used where appropriate for proper names of organizations and for literature citations.

Because of Globe's isolation in regard to the needs of the staff to work with other professionals in varied disciplines, the Center entered into an agreement with the University of Arizona and the Stephanie "Tef" Rodeffer. Arizona State Museum (University of Arizona) in 1971 for cooperation and mutual benefit. In 1972, the Globe facility was Park superintendents have the option of sending individual objects renamed the Arizona Archeological Center and moved to a or entire park collections to the Repository for any or all provided number of buildings in Tucson, most of which were in the University services. A regional repository is particularly useful to the environs. The Center soon contracted with the University and the chronically underfunded parks, providing superintendents with a Arizona State Museum to provide curatorial and library services, as simple and cost-effective way to ensure that their collections are well as for many archaeological and other studies.

THE MUSEUM COLLECTIONS REPOSITORY

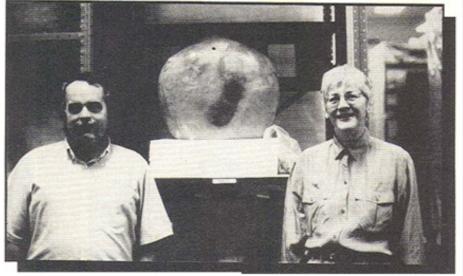
The growth of Center activities in scattered locations eventually necessitated the construction of a new building to consolidate the functions and collections. The present curator of collections, Gloria Fenner, began work at the Center immediately after everything was moved in, in January 1979. She had spent the previous 15 years at The Amerind Foundation, where she had worked with Dr. Charles C. DiPeso, first producing the eight-volume Casas Grandes report and later processing artifacts and documentation for the succeeding Wind Mountain field project in southwestern New Mexico.

Casas Grandes was the perfect experience for dealing with the estimated million objects from some 40 national parks and monuments that were piled in a large mound of boxes in the middle of the new, 22,000-square foot storage room at the Center. Three years were devoted to sorting,

organizing, and shelving these collections and another five years to completing a detailed, computerized inventory. During this period, the facility experienced yet another name change, to the Western Archeological and Conservation Center (WACC).

The collections management division of the Center was designated the Museum Collections Repository by the National Park Service Director in 1985. At that time its role to provide assistance to national parks and monuments in arid lands was formalized and expanded to include an even wider range of services for history, archives, and natural history materials, in addition to the archaeology and ethnography collections already curated. Activities include object and archives collections storage, care, and recordkeeping; conservation; a specialized library; and a computer support service, all under management of the repository chief, Dr.

properly managed and preserved. Alternatively, staff also go to parks in the service area to consult on or assist with collectionsrelated matters. Object collections stored at the



WACC 's Registrar Steve Keane and Curator Gloria Fenner in the repository, with pottery vessel from Lake Mead National Recreation Area. National Park Service photograph by Lynn Mitchell.

Center are available to researchers and for interpretive use, and are loaned to Park Service and other public museums for study and exhibit.

The Repository also encompasses an archival collection containing over 160,000 photographic images, maps, archaeological and ruins stabilization field project documentation, administrative histories for National Park Service areas, and numerous other related historical and anthropological collections. Interested researchers should call ahead and make an appointment with the archivist, Lynn Mitchell.

Beginning early in 1985, curatorial staff participated in a major Park Service initiative to catalog all museum collections that had never been cataloged, a project that continues to this day. This work has supported many well-trained archaeology, museumstudies, and library students from the University and elsewhere, and the mutually beneficial relationship with the University and the Arizona State Museum still continues.

The Center is fortunate to be able to provide conservation services for stored objects and items sent in from the parks. The conservation laboratory is directed by Conservator Jim Roberts, who studied at New York University, and in Europe, and came to WACC from Colonial Williamsburg. Center conservation policy emphasizes preservation and stabilization for storage under Repository conditions rather than restoration for exhibition. The main responsibilities of conservation are threefold: to conduct surveys of objects to assess their condition, to perform needed treatments, and to provide regularly scheduled maintenance of the collections stored at WACC. The condition assessment survey, conducted a year in advance of treatment, provides preliminary information on object condition and forms the basis for scheduling work the following year. Repository conservators also respond to emergency conservation needs for individual objects or for entire collections in parks.

The Center's research library has material that broadly covers the fields of Southwestern archaeology, anthropology, history, natural history, and preservation. Available resources include an 18,000-volume research collection and 75 current journal and annual book subscriptions. A growing collection of microfiche



Assistant Conservator Gretchen Voeks cleans corrosion from iron object using a special abrasive. National Park Service photo by Jim Roberts.

provides access to the archival documents. National access to the collections is through the processing of these resources on the Online Computer Library Center and National Union Catalog of Manuscript Collections.

Primarily, the library provides reference searches and loans materials to staff throughout the Center. However, interlibrary loan service is available to requesting academic and public institutions, as well as to national parks. A public reading area enables visitors and researchers to use the materials within the facility. Due to the nature of the materials housed here, photocopying of

some items may be restricted. All copying is done by arrangement with the staff at a cost to the patron. Arrangements for duplication of photographic images may be made the same way.

Librarian Johanna Alexander and Archivist Lynn Mitchell are responsible for a varied collection of documentary resources. National Park Service Photo by Steve Kean.



WACC'S DIVISION OF ARCHEOLOGY

Archaeologists and staff in the Division of Archeology assist superintendents and park archaeologists in Arizona, California, Hawaii, and Nevada. Of the 46 national parks and monuments in the region, we are directly responsible for all archaeological pro-grams in 20, mostly in the desert. At the helm of the division is George Teague, who specializes in historical archaeology and is an expert on mining. He has worked throughout the region, notably at Death Valley, Lake Mead, and Grand Canyon.

Trinkle Jones, who began her career in the National Park Service in 1977 as the park archaeologist at Grand Canyon, has worked at WACC since 1983 as a project archaeologist and director, doing field work at Petrified Forest, Tumacacori, and Tuzigoot. She also manages the data bank for site records of the 15,000 known prehistoric and historic sites in parks in the region. Computers are used to track site data and all archaeological projects conducted in the parks since Adolph Bandelier first described the Casa Grande ruins in 1881. Steve Baumann has conducted testing and programming since 1990 to develop a computer inventory for the entire park system. Roberta Serface, who began as a volunteer on the 1983 Saguaro survey, archives original records and maps for the projects.

Ron Beckwith's broad experience with the Arizona State Museum and in parks at Montezuma Castle and Well, Petrified

Forest, Great Basin, Tonto, and Organ Pipe helps in his reviews of archaeological clearances for all 46 parks to ensure that appropriate archaeological work is conducted prior to construction projects. When sites are identified during preconstruction surveys, project archaeologists work with construction engineers to relocate construction away from the archaeological sites. Ron also assists with report production and illustration.

The Park Service has always stressed preserving archaeological sites in an undisturbed condition, even more important now that urban development in many areas is crowding park boundaries and destroying adjacent sites. With this in mind, we specialize in survey and long term monitoring. Occasionally archaeological test excavation is used to assess an important site for nomination to the National Register of Historic Places, or prior to stabilization of deteriorating walls or deposits.

Public education remains a high priority. Project results are published in the Western Archeological and Conservation Center's series, Publications in Anthropology, for distribution only to libraries, universities, and consulting firms working in the same area. We are active in providing park rangers with information for their evening programs and nature walks, reviewing brochures and books for education of park visitors, and participating in Arizona Archaeology Month and other public lecture series and events.

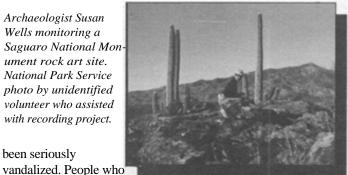
Archaeological Survey and Site Monitoring in Saguaro National Monument. Two Western Archeological and Conservation Center archaeologists, Kay Simpson and Susan Wells, directed a survey of 20 square miles at the Rincon Mountain (East) Unit of Saguaro National Monument in 1983 and 1984. Almost 300 sites were recorded in the lands below the 4,000 foot elevation level that form the Rincon Mountains Foothills National Register archaeological district. Since Susan began working at WA CC in 1983 she also has conducted archaeological surveys and small testing projects in other park areas (Montezuma Castle, Mo ntezuma Well, Petrified Forest, Great Basin, and Lake Mead), but her work at Saguaro continues.



Petroglyphs damaged by weathering in Saguaro National Monument (East). National Park Service photo by unidentified volunteer who assisted with rock art recording project.

One of the most ambitious undertakings of the Saguaro National Monument survey was the complete recording of two localities. These sites have hundreds of individual rock art elements. Prior to our recording project in 1984, many of these elements had

Archaeologist Susan Wells monitoring a Saguaro National Mon ument rock art site. National Park Service photo by unidentified volunteer who assisted with recording project.



been seriously

visit the site often contact us about their concern. Are we aware of the extent of the damage? What are we going to do about it? How could this have happened?

In 1991, Pat Danisiewicz and Joanne Ryan from Saguaro National Monument worked with Susan to rerecord the rock art and develop a strategy to monitor the site. Using the maps, photographs, and drawings produced in 1984, Pat and Joanne developed a card file to aid in relocation and monitoring. Information about each rock art panel, including condition and any damage noted, is recorded on a card, and each card unfolds to reveal a photograph and sketch of the rock art panel.

In the fall of 1991 we enlisted the help of WACC archaeologists Geri Antone, Jeff Burton, Lynne D'Ascenzo, and Roberta Serface, and park volunteer Pinau Moriarty. Using the cards and the original site maps, we relocated all of the panels previously recorded and even found a few new ones. In spite of all the reports of damage we had received since 1984, we found very little new disturbance. The park staff is aware that the site needs protection and now uses the card file to help monitor the site.

Archaeological Survey in Organ Pipe Cactus National Monument. Organ Pipe Cactus National Monument in southwestern Arizona is remarkable for its varied cultural resources. In 1989, Adrianne Rankin, who had directed surveys and excavations throughout the Sonoran Desert of Arizona and northern Mexico since 1976, initiated an archaeological survey of Organ Pipe. This survey has since covered 8,000 acres (2 percent) of the monument. Over 260 prehistoric, protohistoric, and historic cultural resources have been identified, and 183 archaeological sites have been recorded to date.

The Organ Pipe survey reveals that southwestern Arizona was first inhabited around 11,000 years ago, at the end of the Pleistocene epoch, by Clovis culture mammoth hunters and by gatherers of the San Dieguito cultural tradition. Extensive trail networks that are still used by hikers today were originally developed during the Archaic period (8500 B.C. to A.D. 150). Later, the monument area was a major travel corridor for Hohokam shell gathering expeditions to the Gulf of California. Early Hohokam sites, that is those dating between A.D. 775 and 975, are small, temporary camps with Red-on-buff pottery from the Phoenix Basin, probably used during these expeditions. However, by the Classic period (A.D. 1150 to 1400), an increase in



The Hohokam reservoir in this aerial view of Organ Pipe archaeological site AZ Z:13:1 (ASM) was first recorded by Frank Midvale in 1929 National Park Service photo by Mark Daniel.

population and major change in Hohokam settlement patterns occurred, and a large Hohokam community formed near a major trail. The community consisted of a village covering 260 acres, with a reservoir, trash mounds, roasting pits, and house-in-pit structures. This village was surrounded by a number of smaller villages, one of which contains a canal.

Unlike Hohokam Classic period sites in other areas, there is no evidence in the Organ Pipe region for adobe surface structures, platform mounds, or compounds. The ancient Hohokam of this region maintained their self-sufficiency, which was expressed by the continued use of house-in-pit structures and development of large villages centered around reservoirs. Shell artifacts continued to be manufactured for trade and local use. A shift in interaction also occurred during the Classic period: direct trade with the Phoenix Basin Hohokam probably ceased and interaction with the Tucson Basin Hohokam increased. The Organ Pipe survey research sheds new light on the Classic period reorganization and supports the view that the Tucson Basin emerged as a regional influence at this time.

Archaeological Work at Guevavi and Calabazas Missions. The National Park Service is working to acquire these two sites in the Santa Cruz Valley for Tumacacori National Historical Park. The most prominent features at the sites today are the standing walls of Spanish Mission period churches.



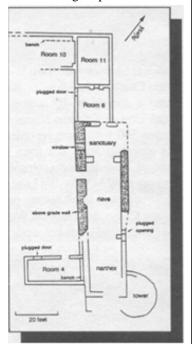
Members of the excavation crew, National Park Service staff, and visitors during a site tour at Guevavi. Note standing adobe mission wall at left. National Park Service photo by B. Rodriguez.

In 1991 Jeffery Burton conducted excavations at Guevavi. He was well prepared for this work after numerous survey and excavation projects in Arizona, California, and the Great Basin for WACC and as a private archaeological consultant. His goal was to mitigate the impact of any disturbance that might result from stabilization of the church walls, which were in danger of collapsing. Recovered architectural details suggested multiple building episodes for the church. Stratigraphy, radiocarbon dating, and artifact analysis provided evidence for a substantial pre-Mission period Native American occupation of the site. Analysis of pollen, bone, and plant remains, which included flotation and pollen analyses of samples derived from adobe bricks, provided information on subsistence change. European foods, such as wheat and cattle, seem to have replaced indigenous foods, such as corn and wild animals, even prior to the founding of the mission.

During 1992, archaeological survey, detailed mapping, and recording of cultural features were completed at both areas to provide information useful for updating the park's general management plan. Thirty-six features at Guevavi and 26 features at Calabazas were recorded. The Guevavi features include remains of the church, *convento* (priests' living quarters), plaza, several compounds and other structures including a possible earlier

compounds and other structures including a possible church, pits used for mixing adobe mud, bedrock mortars, and canals. The recorded features at Calabazas include remains of the church and compound, an 1850s rowhouse, other possible structural remnants, a ditch, and two bedrock mortar outcrops.

The Western Archeological and Conservation Center's Guevavi Project personnel made a detailed map of the Guevavi church and the adjoining convento (priests' and servants' quarters) in 1992. The section of this map shown at right illustrates the church and the convento rooms that were attached to it.



USING THE CENTER'S RESOURCES

The manager in charge of WACC is Center Chief Carol A. "Carla" Martin, who welcomes the rich variety of researchers, interpreters, and museum people who write, call, or visit the curatorial and archaeological staff in pursuit of their own projects. Inquiries for such use may be directed to any of the staff mentioned, at 602-670-6501. The Center does not maintain exhibits, but provides annual tours of the facility during one week of Arizona Archaeology Month.

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Southern Arizona Archaeology **Current Events on the Archaeology Scene**

Arizona State Museum, University of Arizona (Tucson). Last month, Museum archaeologists directed limited excavations at the Marana Mound site, a large Hohokam village near Marana, Arizona, named for its "platform mound"-a large, humanmade structure similar to some Mexican pyramids. Much of the work was by students from the University of Arizona undergraduate archaeology field methods class and from Lawrence Academy (Massachusetts) and Tucson's St. Gregory's High School.

Excavations uncovered a Hohokam house ruin, just downhill from the housing compound that surrounded the site's platform

mound. After abandonment by the Hohokam, this house was filled with trash containing unusually high quantities of obsidian and shell artifacts, besides the more common kinds of stone artifacts and pottery. An ephemeral structure (possibly a ramada) and some prehistoric outdoor surfaces were found within the mound's compound, and other extramural surfaces were identified inside another ancient residential compound that Museum archaeologists had partly excavated in previous years.

Center for Spanish Colonial Archaeology (Tubac and Mesa). CSCA is continuing its excavations within the Spanish military



Archaeology in Tucson Member John Murray Gets Statewide Recognition

It was with great pleasure that the Arizona Archaeology Advisory Commission and on the Center for Desert Archaeology's State Historic Preservation Office announced John L. Murray as the recipient of the sixth annual "Volunteers in Archaeology" Award. Offered as part of Pedro archaeological survey. On the the Arizona Archaeology Month celebration, this special award is given to volunteer crew chief for well over a year an individual who has contributed time and is now authoring portions of a and energy to promoting the protection preservation of Arizona's and archaeological resources through public education or other means.

Murray was nominated for the award by Allen Dart, an archaeologist with the Center for Desert Archaeology and President of the Arizona Archaeological and Historical Society. Supporting letters were forthcoming from many individuals at the Center for Desert Archaeology and the Arizona State Museum, University of Arizona.

Murray, one of Archaeology in Tucson's most active members, is a retired government intelligence officer and teacher who was born in April 1915. Many Archaeology in Tucson

members have gotten to work with him volunteer projects, including the Los Morteros, Romero Ruin, and Tucson Presidio excavations and the Lower San latter project he has been serving as a project report that will be published next year.

In his nomination letter, Dart noted that Murray "had remarkable excavation skills and recording abilities. . . but more than that, he was enthusiastic about archaeology, and he showed great interest in the research problems we were investigating, and best of all he offered many helpful comments.

"Besides his volunteer efforts on surveys and excavations. John Murray has also become more involved in public archaeology and in authoring archaeological literature. In March 1992 he helped me develop and lead a special Arizona Archaeological and Historical Society public tour of archaeological sites... as part of the annual Arizona

Archaeology Month program." Dart noted that Murray had also organized archaeological site field trips on his own.

During Murray's 18-plus years of volunteer work in Arizona archaeology he has worked on more than 30 excavations, surveys, rock art recording efforts, other research projects, and public programs. Besides Center for Desert Archaeology projects he has volunteered time at the Como, Hardy, Houghton Road, Los Morteros, Marana Mound. and downtown sites in the Tucson area, and at Homolovi Ruins near Winslow, for the State Museum and Statistical Research, Inc. He has hiked into rugged canyons of central Arizona's Sierra Ancha with archaeologists Rich Lange and Barbara Murphy to record cliff dwellings and collect tree-ring samples. He has helped update the State Museum's records on archaeological site locations and has assisted with research projects using the ASM archaeological site survey files. And he has served on the Arizona Archaeological and Historical Society's Board of Directors.

Congratulations to John Murray on this well-deserved award!



settlement of Tubac, Arizona as part of a long-term study on Spanish Colonial and Mexican Republicanera cultural developments in southern Arizona. Tubac was established as a mission settlement in the early 18th century and became a garrisoned town from 1752 to 1856.

This past year, CSCA excavated part of a fortified, late 18th century house that has produced extensive evidence of ore-processing. Nearby we uncovered about 15 m of an earthen *acequia* (water canal) that is shown on a 1766 map, plus remnants of a large palizado (upright log structure) of the 1752-1766 period, similar to ones known from colonial New Mexico and Texas.

Work near the Captains' House, sponsored by Arizona State Parks, revealed a large trash feature used between 1752 and 1856. All of the features investigated

have provided a diverse array of Colonial artifacts, including Piman and majolica pottery, chipped stone tools, jewelry, and munitions, plus large quantities of animal bones.

Throughout the year, CSCA operates a free historical archaeology park just south of the Tubac Presidio State Historical Park, and sponsors volunteer and educational programs on weekends. In summers it offers a 6-week historical archaeology field school at the Presidio of San Diego, CA, with college credit available through Arizona State University. For details contact Dr. Jack S. Williams, Center for Spanish Colonial Archaeology, 1743 S. Standage St., Mesa AZ 85202 (602-820-5492).

Desert Archaeology, Inc, (Tucson). DAI completed test excavations for the City of Tucson near South Tucson and Barrio Libre where a water treatment plant will be expanded. Archaeological features identified included remnants of historical adobe homes, outhouses, wells, and trash areas. Many kinds of artifacts

from the 1860-1939 were recovered including hundreds of bottles (many with labels still intact). Archival research and interviews confirm that the historic population of the area included Mexicans, Anglos, African-Americans, and Yaqui Indians.

North of Tucson, DAI completed exploratory excavations for the Arizona Department of Transportation at seven prehistoric sites along Route 188 south of Punkin Center. Further excavations will be done this summer at four of them, including three Salado masonry compounds of two to four rooms apiece and one Hohokam Sedentary period pithouse site. **Some Lectures of Interest**

The Arizona Archaeological and Historical Society, a Tucson-based non-profit organization, offers the following two slide-illustrated lectures in April and May: **The Indian Fashion Show: Glimpses of an American Past (April 19)**—Dr. Nancy Parezo, Curator of Ethnology at the State Museum, presents a humorous look at how commercial fashions acquire the "Indian" look as a result of a traveling museum show. **Prehistoric Textiles of the Southwest** (**May 17**)—Lynn S. Teague, a textiles specialist and archaeologist with the Arizona State Museum, shares her expertise on fabrics and basketry of the Southwest's ancient inhabitants. For details on both AAHS programs call Allen Dart at 327-3509.

The University of Arizona's Department of Anthropology's Thomas Weaver presents **Indians and Forestry in Northern Mexico** at 4:00PM, April 28, in the Emil. W. Haury building on the U of A campus.

On the Tohono O'odham Reservation west of Tucson, DAI surveys for the tribal utility company identified small archaeological sites near the villages of Hickiwan, Big Fields, and Santa Cruz. On the Gila Bend Reservation about a mile west of the Gatlin Mound site (a large Hohokam settlement that included a platform mound and ballcourts), DAI did monitoring and testing at a Hohokam Classic period habitation site where the January flooding of the Gila River had caused damage.

Is your AIT membership current? Check your mailing label, page 8.

Southwest of Tucson DAI conducted an intensive survey of 300 acres near the Mexican border, in the Buenos Aires National Wildlife Refuge. Seven archaeological sites were identified, including 3 large ones (up to 1/2-mile long) with artifact-strewn mounds, and 4 smaller scatters of pottery and stone artifacts.

Pima County Department of Transportation and Flood Con-

contractor, Statistical Research, Inc., has done test excavations at the West Branch site, AZ AA: 16:3 (ASM), anticipating the County's realignment of Irvington Road. Investigations in the area of Mission Road and Wyoming Street revealed 54 prehistoric cultural features, including as many as 24 pithouses that appear to date to the Hohokam Middle Rincon phase. SRI will conduct further excavations at West Branch this month.

Recent archaeological testing in the courtyard of the "Old" Pima County Courthouse (the pink Spanish Colonial Revival-style building with the tiled dome) by the Center for Desert Archaeology confirmed the location of the east wall of Tucson's Spanish Presidio (see *Archaeology in Tucson*, January 1991). The tests also uncovered foundations of other important historical features: the 1881 County Jail, 1880s Courthouse, and the offset, elaborately tiled fountain erected in the courtyard around 1929. As part of an on-going historic preservation project the "Old" courthouse courtyard's early appearance will be restored to include

> reconstruction of the fountain and walkways designed in 1928. As part of the restoration project, an exhibit on the Tucson Presidio now being prepared by the County will include an encased segment of the original presidio wall (salvaged in 1929); also, a strip of polished granite labeled "TUCSON PRESIDIO 1775-1856" will be set in a new sidewalk to mark the course of the Presidio's east wall.

Statistical Research, Inc. (Tucson). Recent projects in southeastern Arizona include excavations in Tucson and near Nogales, and a continuing archaeological site survey in the middle San Pedro River valley.

In Tucson, excavations were completed at the Badger Hole site. AZ AA:13:392 (ASM), for an Inca Investments Company housing development project. SRI's work at this Late Rincon phase Hohokam site revealed ruins of four pithouses and numerous outdoor cultural features. Near Nogales, test excavations were conducted for the Army Corps of Engineers at site AZ EE:9:151 (ASM) on the Buena Vista Ranch. This small site was inhabited prehistorically by people of the Trincheras culture that was centered in Sonora, Mexico, and again during the historical period.

SRI's archaeological survey in the San Pedro valley is funded by grants from the Arizona State Historic Preservation Office, the National Park Service, and SRI. This effort is searching for previously unrecorded archaeological sites to determine how settlements were distributed during the Hohokam Classic period. Part of the valley south of the international border will be included in the survey, in cooperation with the Centro Regional Sonora, Instituto Nacional de Antropología e Historia in Hermosillo. SRI has completed surveys for the U.S. Bureau of Reclamation along both sides of the Colorado River in southwestern Arizona and southeastern California. On the Arizona side, a 1000-acre survey near Mittry Lake documented 1 Archaic period campsite, 1 prehistoric-protohistoric petroglyph locality, and 9 historical sites ranging from mining prospect claims, work areas, and camps to a homestead and the Laguna Dam.

On the California side of the river, a 572-acre survey south of Blythe recorded 10 miles of prehistoric and historical trails and 482 other cultural features at the "Ripley Intaglio locality." The features include geoglyphs and intaglios (designs worked into the ground surface by carving the earth), rock alignments, "dance circles," trail markers, stone tool manufacturing areas, and artifact scatters. Also in California, beginning 8 miles west of Yuma (AZ) and running 40 miles northward, about 6000 acres have been surveyed in the Pilot Knob, Senator Wash, and Palo Verde Point areas. These surveys have recorded examples of prehistoric Patayan and historical Yuman rock art, geoglyphs, and intaglios representing humans, animals, and geometries.

In central Arizona, SRI continues its excavations northeast of Phoenix along the lower Verde River for the U.S. Bureau of Reclamation. Nineteen sites are being excavated in the Horseshoe Dam area, 7 more near Bartlett Dam—the first excavations in this extremely rich archaeological region that was previously known almost exclusively from surface surveys. In addition to these excavations SRI is conducting complex studies of the region's ancient agricultural sites and subsistence resources, and is trying to identify sources of ceramic and lithic artifact materials, to learn more about the ancient Verde Valley people's cultural affiliation, production, and exchange patterns.

SWCA, Inc, (Tucson). SWCA is conducting test excavations at the Gibbons Spring site, AZ BB:9:S0 (ASM), in the northeastern Tucson Basin. This Hohokam site was founded during the

Rincon phase but occupied primarily during the Tanque Verde phase. A historical component, probably related to ranching, is also present.

SWCA's recent excavations at the Gila Butte site along the Gila River identified 4 pit features, 3 canals, 1 reservoir or sedimentation basin, and proThe January issue of Archaeology in Tucson was mailed by Carol Richardson, Jean Reid, and Bess Puryear. Information in the current issue was contributed by the Arizona Archaeological Council newsletter, Suzanne Fish Bruce Huckell, William Longacre, Linda Mayro, Barbara Roth, and Carla Van West. The State Historic Preservation Office provided information on the Volunteers in Archaeology Award. Archaeology in Tucson is printed by the AlphaGraphics Superstore at 7306 N. Oracle Rd.

bable traces of an agricultural field. All are apparently prehistoric. The site's ballcourt has been mapped, and prehistoric canals are being traced out on archival aerial photographs of the region.

A complete survey of Williams Air Force Base southeast of Phoenix has been completed as part of the Base Closure and Realignment Act implementation. The 12 archaeological sites identified range from large Hohokam villages (including the Midvale site) to small resource collecting and processing areas. Subsurface test excavations will begin in the near future.

The City of Phoenix sponsored SWCA's excavations at Pueblo Viejo, a Hohokam site in El Reposo Park. Archaeological records indicate that the site had a ballcourt, platform mound, and three housing compounds. SWCA uncovered a Classic period cremation cemetery with 3 crematoriums, 31 secondary cremations, a palisade, and ancient refuse deposits. This is apparently the first recorded instance of a Hohokam cemetery being associated with a palisade.

SWCA is conducting inductively coupled plasma spectroscopy (ICPS) analysis on Hohokam Red-on-buff ceramics from the Salt-Gila Basin. Early results have provided some information about how buffware was produced and distributed. SWCA is offering

[Concluded on page 8]

Opportunities Available for Volunteers in Archaeology

Archaeology in Tucson and the Lower San Pedro Archaeological Project

Volunteers continued working with archaeologists from the Center for Desert Archaeology over the past months, in a search for archaeological sites in the San Pedro River valley east of Tucson. They discovered many concentrations of pottery and stone artifacts as well as an Archaic period (probably pre-A.D. 500) site with a San Pedro-type projectile point, an A.D. 1100-1450 site with masonry foundations, and an oval rock ring that may date between A.D. 1450 and 1698 (similar to photo in Jan. 1993 *Archaeology in Tucson*).

Archaeology in Tucson members may participate in this archaeological project on **April 4**, **April 17**, **May 2**, **and May 15**. For details call Jim Bayman at 881-2244.

Free Brochure Available on Archaeology Opportunities

A recently published National Park Service brochure entitled *Participate in Archaeology* provides an overview of opportunities for learning about archaeology through videos, journals, and books. The brochure, which also presents opportunities to become involved in archaeological fieldwork, aims to provide the public with better access to archaeological information while supporting the Department of the Interior's heritage education goals. These goals include archaeological preservation and improving the public education and awareness of archaeology.

The free brochure can be obtained by writing to Publications Specialist, Archaeological Assistance Division, National Park Service, PO Box 37127, Washington DC 20013-7127.

ADDRESS CORRECTION REQUESTED

Southern Arizona's Cultural Periods				
	Tucson-	Phoenix-		
Dates Periods	Area Phases	Area Phases		
AD 1450-1698 Protohistoric [None identified]				
AD 1150-1450 Classic	Tucson	Civano		
	Tanque Verde	Soho		
AD 950-1150 Sedentary	Rincon	Sacaton		
AD 750-950 Colonial	Rillito	Santa Cruz		
	Cañada del Oro	Gila Butte		
	Snaketown	Snaketown		
	Sweetwater	Sweetwater		
	Estrella	Estrella		
	Tortolita	Vahki		
7500 BC- Archaic	[Subdivided into			
AD 450	and Late stages]			
AD 450	and Late stages]			
Dates of ancient cultural periods and phases				
differ slightly for the Tucson and Phoenix areas.				
This chart gives approximate dates for Tucson-				
area cultures.				
area cunures.				
If your name and address label indicates that your				

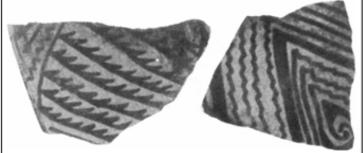
If your name and address label indicates that your *Archaeology in Tucson* membership has expired please renew promptly to remain eligible for all activities, newsletters. and discounts on T-shirts and Center for Desert Archaeology publications.

Southern Arizona Archaeology

[Continued from page 7] ICPS analysis service to other interested parties doing research in central Arizona and will be expanding it to other parts of the Southwest. For information call Mary-Ellen Walsh-Anduze at 602-526-1928.

Tierra Right of Way Services, Ltd. (Tucson). Tierra has just completed excavations at AZ BB:9:243 (ASM), a small Middle to Late Rincon phase Hohokam site in the northeastern Tucson Basin's Santa Catalina Mountains foothills. Two pithouses, several pits, 2 trash middens, 2

outdoor work areas, and 1 large roasting pit were excavated, and surface agricultural features-rock piles, terraces, and checkdams—were recorded. Information from the excavation will be used to determine whether this part of the foothills was occupied permanently by the Hohokam, or only during particular segments of the year.



Examples of Hohokam pottery from the Middle Rincon phase.

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.

For further information about the Center for Desert Archaeology or about *Archaeology in Tucson* call us at (602) 881-2244. For information on the *Archaeology in Tucson* Newsletter specifically please contact the editor Allen Dart.

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