ARCHAEOLOGY IN TUCSON

Vol. 11, No. 1 Newsletter of the Center for Desert Archaeology Winter 1997

A Brief History of Phoenix Archaeology

SPECIAL PHOENIX EDITION
This issue of the **AIT** newsletter focuses attention on our younger, larger neighbor to the north. Several archaeologists were asked to contribute articles on Phoenix archaeology.

by Todd W. *Bostwick, Phoenix City Archaeologist*

Phoenix was incorporated in 1870, and although it has a relatively short history as a municipal government, it was the first city in the nation to hire a city archaeologist. In 1929, as several Arizona archaeological organizations and institutions were being initiated, the City of Phoenix hired Odd Halseth to develop and manage the prehistoric Hohokam site of Pueblo Grande. Pueblo Grande is a platform mound built by the Hohokam. Currently, it is one of the few surviving platform mounds in the Phoenix Basin since most of the 50 or so mounds were destroyed by farming and development over the last 100 years. The mound, a ball court, canals, and the remains of pithouses and compounds lie within the park boundaries.

By the mid-1930s, Odd Halseth had built Pueblo Grande Museum and initiated several archaeological projects. Between 1936 and 1940, he oversaw Julian Hayden's excavation of the Pueblo Grande platform mound, and from 1938 to 1940, he coordinated the Works Progress Administration (WPA) survey of more than 100 sites in the Salt River Valley. Archaeological work slowed during and after World War II. However, over some 30 years, Halseth was an active player in the development of archaeology in the Phoenix area.

Donald Hiser became city archaeologist in 1960, and during his 25-year tenure, the Pueblo Grande Museum was rebuilt and expanded. Hiser also conducted various archaeological assessments of city development projects as required by federal and state historic preservation laws established during the late 1960s and early 1970s. New legislation protecting cultural resources caused a boom in archaeological projects as buildings and highways were constructed in Phoenix.

David Doyel took over as city archaeologist upon Hiser's retirement in 1984. During his six years, Doyel managed federally sponsored city projects, such as the Squaw Peak Parkway excavations of Casa Buena and Grand Canal Ruin, and conducted research at Pueblo Grande.

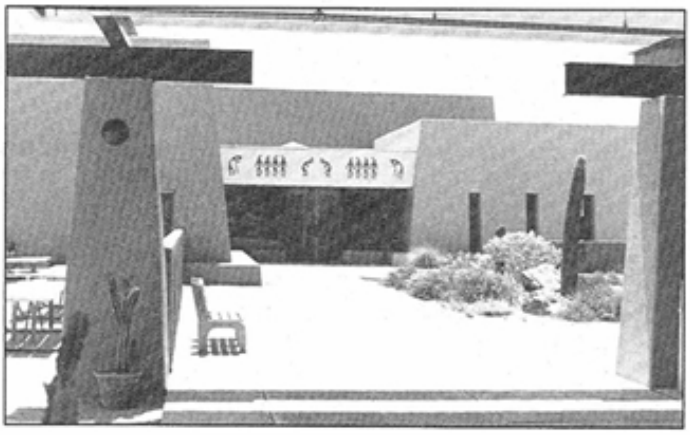
In 1990, I was hired as City Archaeologist after Doyel resigned to pursue other opportunities. A recent evaluation of the city's new historic preservation ordinance had determined that the ordinance did not require archaeological investigations for city projects if no federal or state funding or permits were involved. A committee was formed to prepare a revised ordinance that included archaeology, but unfortunately, it was not approved.

In the absence of required archaeology, I began an aggressive compliance program in which city projects voluntarily conduct archaeological investigations if important sites are to be impacted. In some situations, fundraising is needed to supplement the city's financial contribution, as was the case with the Chinatown Project at the America West Arena. The local Chinese community donated over $20,000 to the project, which investigated a portion of Phoenix's second Chinatown.

Community involvement in this and other projects is high, and many individuals volunteer at the Pueblo Grande Museum. These individuals operate the gift shop, catalog books for the library, and help organize the museum's collections.

The city archaeologist is responsible for managing all city archaeological projects within the 460-square-mile boundary of Phoenix. A variety of sites lie within this area, including boulders covered with petroglyphs in the South Mountain Park, Hohokam villages, canal systems running from the Salt River, and foundations and backyard features associated with Phoenix's historic residents. Because the office has been located at Pueblo Grande Museum since its inception, the position is administered by the Parks, Recreation and Library Department.

Currently, more than 400 city development projects are reviewed every year, with the City spending over a million dollars annually on archaeological projects and programs. To this day, Phoenix is one of less than six cities in the United States with a city archaeologist.



The Pueblo Grande Museum is located at 46 19 E. Washington Street, just north of Sky Harbor Airport. It is easily accessible from Highway AZ 143. The museum's hours are Monday through Saturday, 9 a.m. to 4:45 p.m., and Sunday from 1 p.m. to 4:45 p.m. Visitors can tour the platform mound, view the nearby ball court and canals, and visit archaeological and ethnographic exhibits on Phoenix's past. Workshops, such as pottery making and Archaeology for Kids, are held throughout the year. The PGM Auxiliary operates the gift shop and holds the annual Indian Market, where a variety of crafts, art, foods, and performances are presented. The museum's phone number is 602-495-0901.

Archaeology Above and Below Ground at Las Canopas

By Mark Hackbarth, Northland Research, Inc.

How can archaeology be conducted above ground? Archive "excavations" are a part of most projects, but at Las Canopas this task loomed very large. Here, digging into the past focused mainly on the written records of fieldwork that had never been published.

In the summer of 1996, the City of Phoenix Parks, Recreation and Library Department began to upgrade recreational facilities at Esteban Park. Before construction, the archaeological site of Las Canopas was investigated at the request of city archaeologist Todd Bostwick.

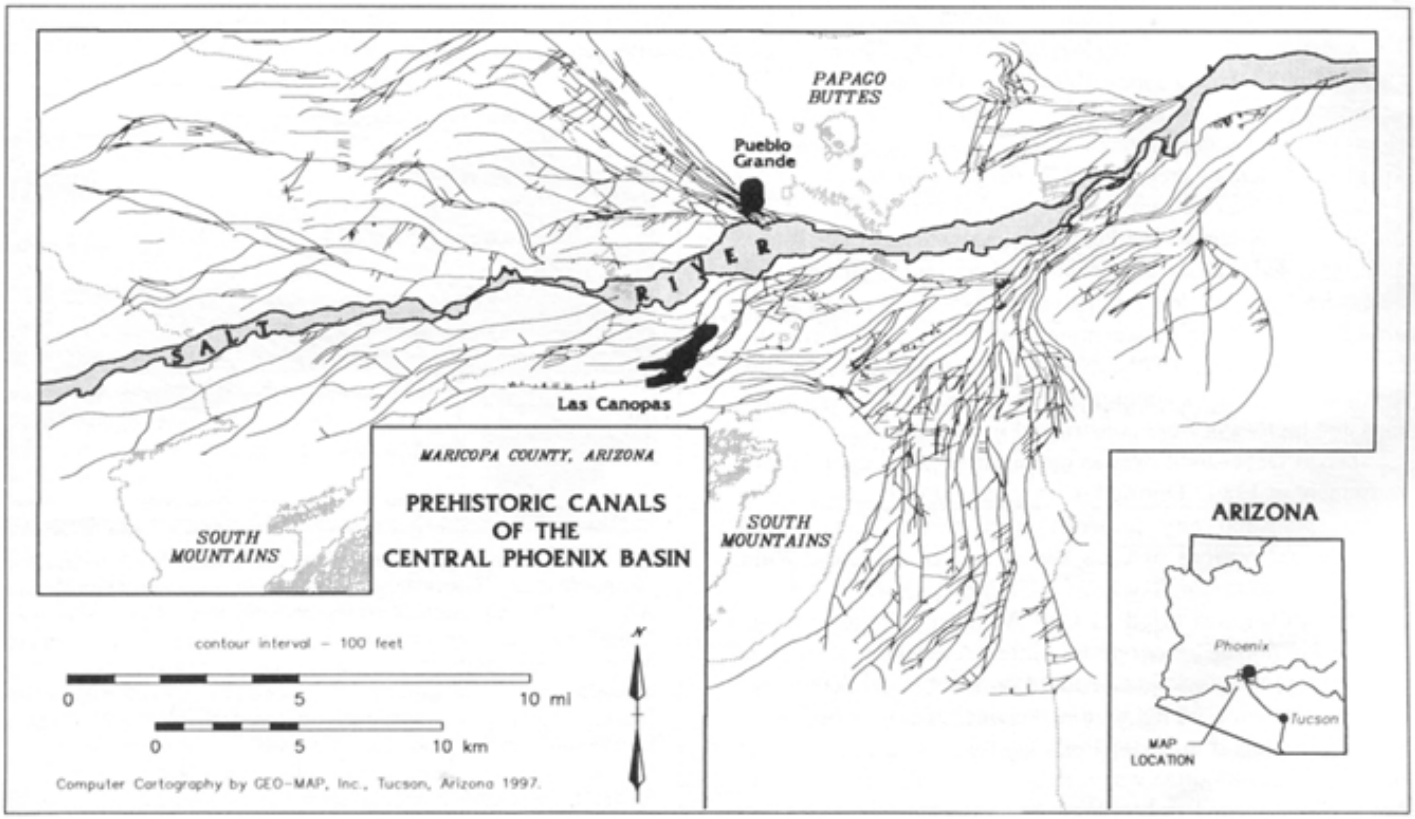
The prehistoric site of Las Canopas covers much of Esteban Park, a 50-acre parcel within urban Phoenix south of the Salt River. Las Canopas is a large, multi-component Hohokam habitation site nestled between the routes of prehistoric canals Viejo and Cottonwood. The site has attracted interest from archaeologists throughout the years and has been the focus of sporadic work. Unfortunately, very little of this research has been published, and some was never even recorded in written notes. One goal of the Las Canopas project was to bring together this informal information.

WHAT'S IN A NAME?

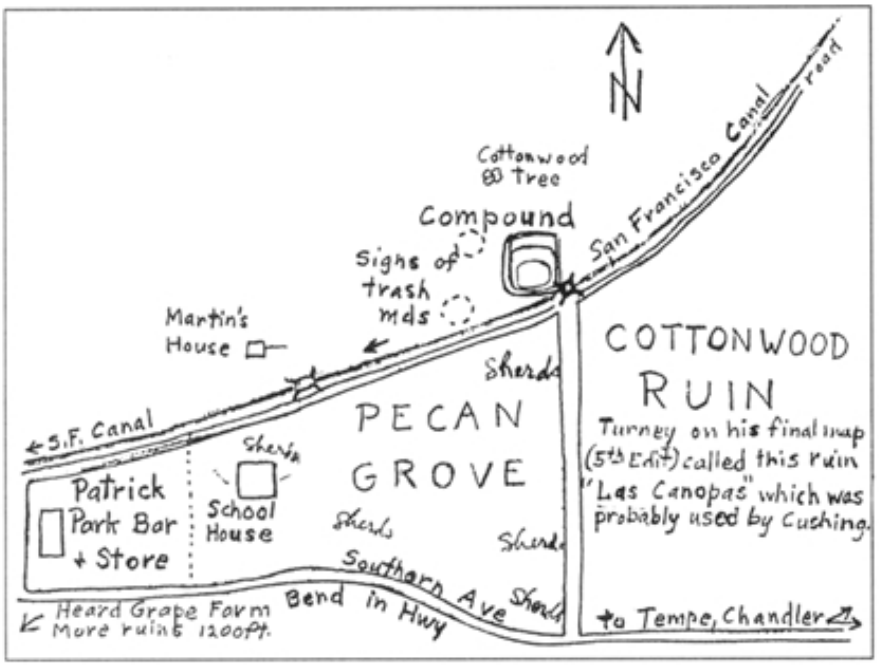
How can a name generate controversy? Unfortunately, in many ways. The first thing the researchers discovered was that each previous archaeologist had used a different site name. In addition, the earliest name, Las Canopas, may in fact be a misspelling. The term "canopas" refers to water-worn river rock or eroded concretions that were found in archaeological contexts.

It is believed that Frank Hamilton Cushing applied this name to the site in 1887, but some archaeologists think that the name was a misspelling of the word "canoas," which actually was a reference to a prehistoric canoe found in a nearby canal by Cushing.

Emil Haury, who analyzed and reported on the results of Cushing's fieldwork as his doctoral dissertation, stated that the site the Hemenway Expedition excavated and called Pueblo de Las Canopas is not the site located in Esteban Park. By comparing Haury's maps with several other sources, however, it appears that this indeed is the same Las Canopas where Cushing worked.



Prehistoric canals in the Phoenix Basin. Map by Geo-Map, Inc.



From Frank Midvale's field notes:
"When I first saw this compound mound about 1929 it was undisturbed and in good condition. This was probably due to its lack of location back in the remote farmlands along a canal bank road which made it hard to reach…The large mound was then called Martin's Ruin, after the owner. In 1931…[w]e got permission from Mr. Martin to dig 2 test pits to learn what type of mound it was. These were dug with 2 helpers near the south or higher part of the mound. In each test several floor levels were found and portions of rammed-earth walls 14 [inches] wide…[In 1937] I returned with James Simmons to retake the shot and found the ruin leveled and nothing left to photograph."

A sketch map drawn by Frank Midvale uses contour lines to show the approximate shape of this platform mound and to indicate that the southern end was higher. Original field notes are on file at the Dept. of Anthropology, Arizona State University.

SIFTING THROUGH THE DATA

Among the resources available for study were Works Project Administration (WPA) testing records conducted in 1939 as part of the Salt River Valley Stratigraphic Survey; salvage excavations at the Larson Locus in 1963; multiple observations of the site by Frank Midvale from 1930 to 1973; the report from the 1967 ASU field school at the Silo site (the only published source of work at the site); 1975 salvage excavations at the Greeson Locus; reports from ASU field schools in 1977, 1980, 1981, and 1982; monitoring of utility trenches in 1986 and 1988 by Pueblo Grande Museum; two projects by contract archaeology firms near the site; and oral histories from several fieldworkers. Obviously, these data sources had different goals and study areas, but with this much work completed, a good picture of the site was available from the records.

Some of the existing information was brief but extremely important. Frank Midvale recorded the site and excavated two test units in a platform mound. His one-page description of the results is the only record we have of a Classic period platform mound in the vicinity of Esteban Park. In fact, Midvale's map shows that the mound he tested was actually located within the limits of Esteban Park.

Other evidence from the site indicated that a Preclassic component was established in the northeast corner of the site and lasted from the Snaketown phase (AD. 700-800) to the Sacaton phase (AD. 900-1150). Farther down the prehistoric canal is found the Classic period occupation (AD. 1150-1450) that the WPA and Midvale tested.

From the evidence collected so far, site structure and growth of Las Canopas can be seen to mimic what has been observed at other large Hohokam sites. Habitation areas are often found along canals, and community centers (ballcourts and platform mounds) are located uphill from the canals near the center of the habitation zones.

NORTHLAND'S 1996 FIELDWORK

Limited fieldwork was conducted in 1996 at Esteban Park where improvements were planned. Trench excavations identified canal sediments in the profiles, and excavation of the features confirmed the orientation and content of the canals. Samples of sediments were collected from each canal for later analysis. A careful collection of artifacts from the modern ground surface established the location of the densest artifact concentrations.

Although the below-ground fieldwork was brief and limited, the above-ground archaeology allowed a wealth of information to be collected and summarized. We now have a better understanding of how the site grew and how it was organized. Furthermore, we now know that the next phase of Esteban Park redevelopment has the potential for locating the platform mound of a sizeable Classic period habitation site.

Roughly 50 platform mounds are estimated to have once been present in the Phoenix area. Only a few mounds, such as Las Colinas, La Ciudad, and Pueblo Grande, have seen large-scale excavations, and only Pueblo Grande and Mesa Grande are preserved in the Phoenix urban area. In the context of such large-scale loss of archaeological resources, the fragments of information that have accumulated somewhat haphazardly over the past century can assume an enormous value. All too often, they are all that is available.

Uncovering Traces of Daily Life at the Phoenix Indian School

by Owen Lindauer; Historic Preservation Specialist
Arizona Department of Transportation

At Arizona State University, archaeologists have recently completed their investigations of the Track site, a turn-of-the-century trash dump that yielded artifacts associated with the operation of the Phoenix Indian School (officially known as the United States Industrial Indian School). The school closed in 1990, and the property was to be divided among several new owners. The investigation of a refuse dump from the initial years of the school's operation has provided evidence of life at the school for both students and employees. When combined with historic documents, this new information gives us a fuller, more engaging picture of past federal education policy and life in "Victorian" Phoenix.

Removal of the running track and football field that covered the historic Phoenix Indian School dump. View looking north.

The Phoenix Indian School served as a coeducational federal boarding institution for American Indian primary and secondary students between 1892 and 1900. The federal government's goal was to educate Indian children and to bring Native American tribes into the twentieth century by helping them interact with and be a part of the larger American culture.

The school also benefited the city of Phoenix economically by creating jobs, providing a source of inexpensive student labor, and purchasing supplies locally. Phoenix residents benefited socially as well because the school regularly staged concerts to which the public was invited. The Indian School was described by one of its early twentieth-century pupils as a contributor to the personal growth of the students and important in that it fundamentally changed their concept of the world.

In 1990, an initial archaeological testing program directed by Drs. Michael Barton and Steve James of ASU uncovered several trash deposits in what they called the Track site. Artifacts beneath the running track and football field had been deposited from the opening of the school in 1892 until about 1925. Five years later, ASU collected a sample of these artifacts in order to study the lives of the Indian School's pupils.

SCHOOL ASSIMILATION

The main purpose for establishing the Phoenix Indian School was to assimilate Indian pupils into American society. In time, it became the West's largest boarding school, with enrollment initially in the hundreds and eventually approaching 1,000 after the turn of the century. By the 1890s, the federal government was committed to incorporating Indians into the mainstream of American life and, by doing so, dispossessing them of reservation lands.

Indian people experienced a unique set of problems, which the federal government tried to solve. Most Indians of that period could not communicate in English. They were unable to live a traditional life, relying on hunted and gathered foods, but they also could not productively work in the off-reservation economy. They suffered from disease and health problems and differed in their outlook by being neither good Christians nor patriotic American citizens. The education of Native American children "promised" to correct these problems. Reformers dedicated themselves to devising a process whereby Indians would be assimilated and reservations abolished. This required that an Indian pupil's personal identity be completely remade.

Thomas J. Morgan was commissioner of Indian Affairs when the Phoenix Indian School was established. He viewed the nonreservation school as a significant part of his reservation program, and he thought that his schools could absorb Native Americans as successfully as the American public school system had absorbed recent immigrants from Europe. His expectations for Indian schools were high, and he believed it was possible to radically improve the condition of Indian people in a single generation.

The instrument of the assimilation process at the Phoenix Indian School was a military-style boarding school that was

part workhouse, in a Dickensian sense, and part grammar school. The Indian School differed from other contemporaneous Phoenix schools in that the students were often forcibly separated from their parents to attend. Indian pupils were compelled to labor in kitchens, machine shops, laundries, and in the fields to provide for the basic operation of the school. The education they received denied their tribal history, language, and culture, offering new and different values and customs, some of which conflicted with the teachings of their parents, especially religious beliefs.

The four aims of federal Indian education policy in the 1890s were (1) to provide the rudiments of an academic education, or the ability to read, write, and speak English; (2) to teach individualization; (3) to teach Christianity; and finally (4) to teach citizenship. Artifacts from the Track site excavations, along with documentary records, provide tangible traces of how these four aims were implemented.

The process of remaking a pupil's identity began as soon as he or she arrived. All outward signs of reservation background were stripped away by school policies, which forbade Indian speech, religion, and clothing. A student's "home identity," tied to traditional Indian ways of living, radically contrasted with "school identity," which was the planned outcome of the four aims of Indian education.

EVIDENCE OF SCHOOL IDENTITY

Items found in the dump were mostly material remains that directly or indirectly relate to the process of acquiring the school identity. Artifacts that pertain to the pupils' home identities were present but were comparatively rare.

Visible outward changes in the pupils marked the new imposed school identity. Traces of the uniforms preserved in military buttons and glass buttons from dresses not only show changes in appearance but represent the introduction of a previously unknown intensity and style of discipline. Military discipline was used to control the large numbers of children at the school, as well as to teach pupils the values of responsibility, leadership, cleanliness, and self-esteem.

Comb recovered from the Phoenix 1ndian School dump marked with pupil's name, "Bateman."

Dresden Stone China maker's mark dated 1895 from white ware serving dishes recovered from the Phoenix Indian School dump.

Students' tastes in food and drink also marked important changes. The presence of many soda bottles in the dump demonstrates that pupils were introduced to sweet beverages, changing their traditional diet and introducing them to the consumer economy. Dishes and cutlery were ubiquitous in the trash layers. Such objects would have fundamentally altered how pupils viewed the organization of traditional family meals. The ritual use of dishes and eating utensils three times daily instilled lessons of social order, courtesy, and health awareness. Once schooled in this manner, it would have been difficult or impossible for a pupil to return to the family cooking fire and eat from a common bowl.

CHANGES IN SELF-PERCEPTION

A few artifacts indicate changes in self-image that acquiring a school identity entailed. Perceiving oneself as an individual was reflected in the discovery of pupils' names on artifacts. The goal of teaching individualization was expressed by the marking of names on personal items such as combs and toothbrushes. This idea had to be taught because on the reservation, students learned that they had obligations linking them to their families, clans, villages, and tribes, and communal ownership and interdependency were stressed.

Indian School pupils were also taught about the importance of cleanliness and the concept of germ transmission so that they would try to avoid mistakenly using someone else's personal items. Toothbrushes recovered from the Track site were marked in ink, were engraved, or had scratched marks. Markings in ink were very apparent when compared with scratched names, which were barely visible, even under close scrutiny. These scratched names could reflect an individual's desire for marking, but they can be differentiated from marks intended to signal ownership in a public context.

The presence of both kinds of markings attests to the varying receptions of the idea of individuality. If the frequency of items with marks versus those without marks can be said to

measure the success of the lesson of individualism, few students chose to express themselves in this way. Only 6 percent of the toothbrushes and 12 percent of the combs had markings (9 of 150 toothbrushes and 9 of 78 combs collected).

EVIDENCE OF HOME IDENTITY

Much of a pupil's home identity was probably hidden from teachers and school employees for fear of punishment. Most students probably suppressed their home identity while at school because it would have been seen as a statement of individual resistance to boarding school life. Practicing aboriginal religion, defining oneself in traditional ways, and using traditional technology such as stone working were aspects of the home identity expressed by students at school.

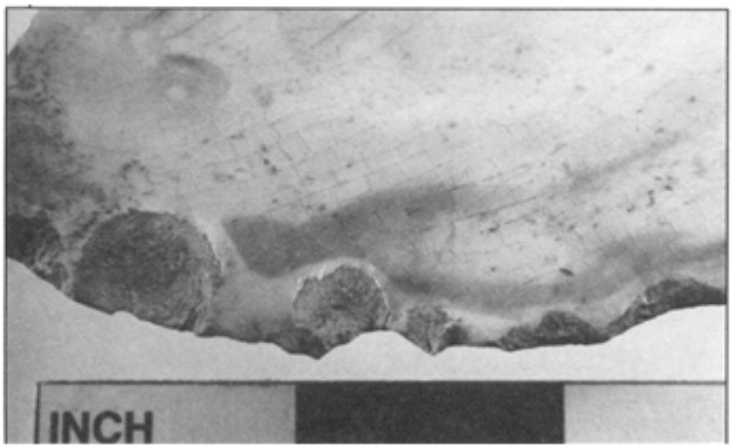
Because one of the school's goals was to Christianize pupils, the practice of aboriginal religion was forbidden on campus. School policy persuaded pupils to reject and abandon the spiritual identity brought from home. However, it probably was possible to practice many religious behaviors, such as making prayers of thanksgiving or performing a purification ritual in privacy without the use of objects that could be recognized as contraband. A former Navajo pupil mentioned that a cornfield behind one of the school buildings made her think of home and the many times she went into the fields to gather the yellow powder (corn pollen) from the tassels for sacred ceremonies.

Sacred objects such as effigies and fetishes would have to have been brought from home and hidden because if they were discovered by school employees, they probably would have been confiscated and discarded. This is probably why several objects that could be either effigies or fetishes were found in the excavations. These objects include miniature representations of animals (a bird and a quadruped) made of clay and a small, smoothed nonlocal pebble that could have been a fetish much as the Zuni utilize pebbles as fetishes.

Defining oneself in traditional ways may have been another means of expressing home identity. Some of the markings on personal items reflect Native American customs. Rather than using their "American" names to mark their combs or toothbrushes, some pupils chose to mark items with numbers, dates, or simple marks. Some teachers understood the Native concept of personal names. Kate Pierson, a teacher at the school, made a 1928 journal entry regarding addressing students and the "Indian" view of names. She noted that "how you are called" should be asked, rather than "what is your name." A name is personal and secret and not to be told, for whoever knows it has power over you.

Finally, some pupils expressed their home identity by practicing traditional stoneworking technology. Records from the early years of the school indicated that vocational classes were an important part of the curriculum and that metal working, blacksmithing, and woodworking shops existed and were stocked with modern tools and mechanical equipment. Therefore, traditional Native American woodworking tools probably would not have been used in a school setting. But a crude stone projectile point, a drilling tool fashioned by a stu-

Student nurses at the Phoenix Indian School, circa 1930s (photo courtesy of the Bureau of Indian Affairs).



Close-up of flake scars from a bifacially flaked dessert plate, from the Phoenix Indian School dump.

dent for personal use, was found at the excavation.

Finding suitable stone raw material probably was difficult, but discarded window glass and bottles provided easily obtainable materials that could be flaked or worked like stone. Modified glass included fragments of window glass used as scrapers and retouched bottleneck used as spokeshaves. We can hypothesize that practicing traditional technology was a response to the domination of modern technology in shop classes. The use of traditional toolmaking technology, rather than just tool using, is reflected by the presence of several dinner plates that were bifacially flaked but not used as tools.

CHANGING EDUCATIONAL PHILOSOPHIES

While the boarding schools exposed pupils to the clash of cultures that is part of the modern world, they did not properly prepare them to identify themselves as both tribal members and American citizens. This is perhaps one reason why most of these schools are closed today. Boarding schools at the turn of the century led to or reinforced the problems of prejudice, racism, discrimination, and loss of self-esteem for Native American students. In fact, this led to a situation where many adult and young adult Indians know little of their own history and culture today.

However, the importance of preparation for the inevitable clash of Native and dominant cultures has now been realized. Even before boarding schools began to be phased out, reservation schools were opened so that children need not be separated from their parents. The education missing from the boarding school in Native language, lifestyle, history, and culture is now imparted in reservation schools, as well as by parents.

Because reservation schools are located close to home, parents can assume their important role as teachers and can reinforce elements of Native culture that are critical ingredients for building and retaining self-esteem. Now Indian children can rely on both their parents and reservation-based schools to educate them in Native American values and traditions, as well as to provide guidance so they can make their own decisions about life in the modern world.

NOTE: Dr. Owen Lindauer conducted this project as a research faculty member of the Department of Anthropology at Arizona State University. He is now a historic preservation specialist in the Environmental Planning Section, Arizona Department of Transportation

(E-mail: olindauer@dot.state.az.us).

Excavations on Blocks 72 and 73 of the Phoenix Original Townsite

by J. Homer Thiel, Center for Desert Archaeology

Desert Archaeology conducted eight weeks of fieldwork in Phoenix in the fall of 1996. The Phoenix Federal Building and United States Courthouse is being built on two city blocks within the original Phoenix townsite. The project was sponsored by the General Services Administration through a subcontract with Dames & Moore, Inc.

More than 200 archaeological features were found. Prehistoric remains included an Early Ceramic pithouse dating to about A.D. 200. This is one of the oldest structures known from the Phoenix Basin.

Historic features included the Phoenix Illuminating Gas and Electric Works, which was the first utility in the town; the foundations of the Phoenix Trunk Factory; and a basement for a house built in the early 1880s. Backyard areas had many outhouses and wells. Excavations within these features yielded bottles, dishes, tin cans, and many other items (see back cover). Unusual artifacts included a rock and seashell collection, a pair of false teeth, and printers' type.

Research and analysis have just begun. We will be looking at the early prehistoric occupation of Phoenix, examining the industrial nature of the gasworks and other businesses on the blocks, and studying the health care and sanitation of turn-of-the-century Phoenix residents.

Center for Desert Archaeology's

Spring Workshops in Stone Tool Technology

APRIL 19

Beyond Arrowheads: Introduction to Flaked Stone Technology

APRIL 26

Introduction to Ground Stone Technology

For more information, call Lisa Armstrong at 881-2244.

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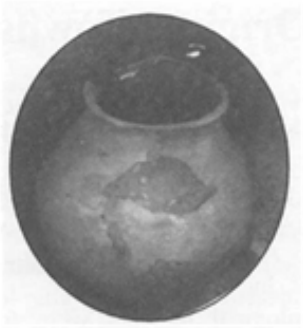

Desert Archaeology recently completed excavations on historic Blocks 72 and 73 in Phoenix. An unbroken Native American water olla lies in the soft fill of an outhouse. This and other Phoenix projects are reported in this issue.

Time to Renew?

If your 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.

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1997 CIENEGA VALLEY SURVEY DATES

	Saturday	*Sunday*
January	none	26
February	1	16
March	1	16
April	5	20
May	3	18

To sign up please call Lisa Piper at The Center for Desert Archaeology, at 520-881-2244

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

is the Center for Desert Archaeology's membership program. Center members receive the *Archaeology in Tucson* quarterly Newsletter; discounts on the Center's publications; and opportunities to participate in its archaeological projects, attend site tours, and come to archaeology lectures. Memberships runs for one year from when the dues are received.

For further information about the Center for Desert Archaeology or about the Archaeology in Tucson program, call Lisa Armstrong at 520-881-2244. For information on the ***Archaeology in Tucson*** newsletter specifically, please contact the editor, Homer Thiel.

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