New Excavation Opportunities Arise for Volunteers

Old Pueblo Archaeology Center will have openings this summer and fall for volunteers to dig at the Sabino Canyon Ruin and help in our archaeology lab nearby at the Fenster School of Southern Arizona. These opportunities will be available during archaeological field school sessions and teacher workshops.

Most of the chances for volunteers to dig will be on Saturdays and Sundays when Old Pueblo is offering its Archaeology in the Schools workshops for teachers (see page 6). There will also be some weekday opportunities for volunteers this summer when other archaeological field school sessions are in session at the Sabino Canyon Ruin.

We also anticipate that Old Pueblo will be excavating some other Hohokam sites in Tucson this summer and fall, and that we will be allowed to provide dig opportunities for volunteers on those projects.

To be eligible to volunteer you must be an Archaeology Opportunities member (see page 7 for membership information). Call Old Pueblo at (520) 798-1201 for dig and lab program times, other details, and volunteer reservations.

A burned sand dollar found 60 years ago in an excavation at the Sabino Canyon Ruin may be the only sand dollar ever recovered from a Hohokam archaeological site. This specimen and the other items shown were unearthed at the ruin in 1936 by William Neil Smith. Story page 2.
Dear Mother,

Thursday I found a pair of arrow shafts that was shaped like a duck. Friday I found the same pot that I found yesterday; my first whole pot to get. This is about 1 foot long by 1/2 foot wide. The shape is that of a duck. Like the picture. Mr. O’Leary plans to use this for a water pitcher. Today I would like to get into the museum and ask some questions about it.

Yours,
William Neil Smith Jr.

A shoebox full of Indian artifacts was recently donated to Old Pueblo Archaeology Center by anthropologist William Neil Smith. This collection, which had been cushioned in cotton for several decades, included fired clay, stone, bone, and seashell items, "Apache Tear" obsidian nodules, other mineral specimens, wood charcoal pieces, and curious masses of tiny charred seeds. Also in the box, a yellowed piece of paper bore a handwritten key:

Charred corn or grain (ground) from S.A.S. Ruin.
Also bones & other artifacts from S.A.S. Ruin

The shoebox's ancient artifacts had been unearthed and collected by Smith while he was a student at the "S.A.S." -- the Southern Arizona School for Boys -- in 1935-1936.

Located in the northeastern Tucson metropolitan area just above the confluence of Sabino Creek and Bear Creek, the "S.A.S. Ruin" was designated archaeological site "Ariz. BB:9:32 (ASM)" by the Arizona State Museum in 1938. It is now more commonly known as the Sabino Canyon Ruin.

Unlike most private collectors of ancient relics, Smith sought and followed the advice of professional archaeologists. With guidance from Professor Byron Cummings, the first University of Arizona archaeology department head, he kept notes and made a sketch map of his excavations at the S.A.S. Ruin, and wrote interpretative papers. Dean Cummings even encouraged young Smith to write a report on his work.

After decades of world travel and anthropological study Smith did just that. Collaborating with archaeologist J. Homer Thiel, he wrote an article entitled "A Bird Effigy Vessel from Sabino Canyon Ruin." It was published in January 1995 in Archaeology in Tucson, the newsletter of Tucson's Center for Desert Archaeology.

The Bird Effigy article describes a Hohokam pithouse, "Ruin A," that Smith and other students excavated in 1935-1936, and a most unusual artifact he discovered while digging in the S.A.S. Ruin: a completely reconstructible pottery vessel in the shape of a duck's body. At 15 inches long and 8½ inches wide it is the largest known example of a Hohokam bird-shaped vessel. The letter William wrote home, partly reproduced here, enthusiastically describes his discovery.

Smith's original notes and drawings that documented his excavations tell a great deal about the context of the duck pot, several other pottery vessels he later reconstructed from recovered sherds (including he is shown holding below), and items that were in his shoebox collection.

His written records testify that Smith was interested in conducting real archaeological excavations at Sabino Canyon Ruin, rather than just destructive pot-hunting.

The S.A.S. Shoebox Collection, 1935-1936. William Neil Smith's shoebox full of materials from the S.A.S. Ruin contained nearly 200 ancient items when he donated it to Old Pueblo Archaeology Center this year. Though he admits his memory of precisely what was recovered where in his excavations has become a bit hazy in the sixty years since he excavated at Sabino Canyon Ruin, Smith is fairly certain that all but one of the things in the box were recovered during his excavations in the "Ruin A" pithouse.

Pinedale Polychrome and Other Ceramics from Ruin A. Smith's box included 10 pottery sherds, a hand-modeled figurine fragment, and 2 pieces of (probably accidentally) fired mud from Ruin A. With one exception, these sherds are Hohokam ware, mostly the Tanque Verde Red-on-brown type made from A.D. 1150 to 1450. Our cover photo shows an example of this type, plus front and back views of another of the shoebox's sherds, identified by archaeologist Dr. Alexander J. Lindsay, Jr., as Pinedale Polychrome.

The Pinedale pottery was made between A.D. 1300 and 1350, mostly in northeastern and east-central Arizona near the Mogollon Rim. Smith's specimen is the only example of that type yet known from the Sabino Canyon Ruin, and the best evidence that occupations there may have lasted later than A.D. 1300. Smith says it came from a layer of fill well above the floor in Ruin A, suggesting it was deposited in the house fill after a fire destroyed the structure.

The ceramic figurine fragment with 6 mm diameter sockets for eyes (cover photo, middle right) evidently represents the head of a bighorn sheep. Both of its horns are broken off and missing.

One of Smith's fired mud specimens evidently was house construction material, originally applied to a ceiling or wall where a layer of reeds or peeled-stick matting was affixed to a wallpost or ceiling beam. On one side it bears the
impression of a peeled-bark beam and on an adjacent face parallel imprints of eight reeds or peeled sticks, each 6 to 10 mm in diameter, all oriented perpendicular to the woodgrain of the beam.

Stone, Bone, Shells, Sand Dollar.
The shoebox collection included flaked stone artifacts and unworked minerals. Notable among these are a 74 mm long, double-edged scraper of basalt, flakes and a core of reddish silicified wood or jasper, and an obsidian flake. The collected minerals include three “Apache tear” obsidian nodules (cover photo) that a Hohokam occupant of the site probably was saving for eventual manufacture into flaked stone artifacts, but his or her plans were foiled when the house burned down with the nodules inside. Other minerals included pieces of reddish hematite, a scaly, gray-black mineral (hematite or manganese?), and a limestone fossil clam shell cast.

Sea-mollusk shell jewelry is fairly common in Hohokam settlement sites, and marine mollusks were represented in the Smith collection by the Glycymeris bracelet fragment and whole Olivella shell bead shown in the cover photo, plus one other worked Glycymeris shell fragment and an unworked Laevicardium clamshell fragment.

The Smith shoebox collection also included another sea creature’s shell that may be unique in Southwestern archaeology -- the 38 mm diameter sand dollar shown in our cover photo. Members of the Echnioidea Family, which includes starfish, sand dollars apparently have never been recovered from any other excavated Hohokam archaeological sites. They may not be known from Southwestern U.S. Anasazi, Mogollon, or Archaic sites, either.

From a verbal description provided by Old Pueblo Archaeology Center, shell artifact specialist Arthur Vokes tentatively identified Smith’s Sabino Canyon Ruin sand dollar to the genus Encopis. This taxon can be found in the Gulf of California, just like most of the mollusk species the Hohokam procured in abundance for making shell jewelry.

The sand dollar is burned, as were most of the items Smith recovered from Ruin A. He does not recall the exact provenience but thinks the sand dollar came from the upper fill of Ruin A.

“... The Hohokam National Condiment.” The shoebox collection also included 33 pieces of charred wood and several lumps of carbonized nonwood material. Most of the charcoal specimens appear to be mesquite, a species still ubiquitous at the Sabino Canyon Ruin. One, however, appears to be from a coniferous tree, perhaps pine or Douglas fir. When funds are available Old Pueblo Archaeology will provide it to the University of Arizona’s Laboratory of Tree-Ring Research for species confirmation and, if appropriate, tree-ring dating.

The carbonized lumps are the “charred corn or grain” noted in Smith’s yellowed paper label. Albuquerque ethnobotanist Lisa W. Huckell identified three of them as masses of burned tansy mustard seeds. She commented that tansy “could probably be considered the Hohokam national condiment -- anything to make that corn meal mush taste a little different!!!”

An Item Not from Ruin A. Also in Smith’s shoebox was a large piece of micaceous, unpainted brownware pottery that was reshaped by chipping and grinding to form a disk 106 mm diameter and 10 mm thick. It has a 17 mm diameter hole bored through the middle.

Smith reports he found this disk in a rock-lined, circular structure on the western edge of the ruin, at the edge of the stream terrace overlooking Sabino Creek. He thought that structure was a ceremonial underground kiva when he began digging in it, but that notion was quickly quashed when he encountered a hard caliche soil horizon only a few centimeters below the surface. Since then, he’s speculated it might be a historical Tohono O’odham ki, or round house.

A Historical Inclusion. Several reddish-black, platy nuggets in the box were nestled deep in a 5¼- by 3¼-inch brown paper envelope that may be a collectible in its own right. Illustrated with a Fred Geary line-drawing of pack mules and wrangler on a rugged trail, it bears a printed advertisement:

Grand Canyon National Park
Set No 3 POST CARDS
Published by Fred Harvey
10 cards 25 cents

POSTAGE SEALED 4 CENTS
POSTAGE SEALE 1¼ CENTS

Still adhering to the envelope, a pasted-on label strip advertises a special deal:

10 cards 15¢

Hohokam pots and Arizona saguaro cactuses in New York.

William Neil Smith brought two Tanque Verde Red-on-brown pottery ollas he recovered from the “S.A.S. Ruin” (Sabino Canyon Ruin) to East Quogue, Long Island, New York, along with the saguaros shown replanted there in the foreground, at the end of the 1936 school year. Photo ca. 1936 provided by Mr. Smith.
Archaeology Opportunities Volunteers Help Excavate the “Rock Hard Site”

In early May, six Archaeology Opportunities volunteers and a student archaeology intern braved premature summer-like heat and hand-blistering digging conditions to help archaeologists Jeff Jones and Robin Rutherford excavate at the Rock Hard site, AZ BB:9:173 (ASM), in Oro Valley. Developer Cottonwood Properties is the research sponsor.

Dubbed the “Rock Hard” site because the only viable excavation tool was a railroad pick, AZ BB:9:173 was a small settlement occupied by the Hohokam during the Early or Middle Rincon phase between A.D. 950 and 1100. It lies on a dissected alluvial fan surface in the Sun City Vistoso area overlooking the confluence of Big Wash and Twentyseven Wash.

Eight archaeological features were identified in studies of the Rock Hard site by the Pima Community College Archaeology Department and Old Pueblo Archaeology Center. In a preliminary test trenching program in March, Pima recorded five of them, including a pithouse, a midden of accumulated household refuse, 2 roasting pits, and 1 surface rock ring. Three other pithouses were found during follow-up testing and more extensive archaeological excavations by Old Pueblo in April and May.

Four Pithouses. One of the structures, designated Feature 5, was a small, oval pithouse with the long axis bearing to the northeast and its entry facing southeast. As they excavated down to the floor the archaeologists and volunteers had to dig through ashy gray, compact earth that contained quite a few artifacts. Materials in the fill suggest that once the Hohokam abandoned the house, the wood and earth used in its construction deteriorated and collapsed into the shallow pit in which the house originally had been built, and that folks still living at the site afterward tossed trash in with the fallen construction debris.

Partly beneath and partly outside of Feature 5 the excavators discovered another pithouse, Feature 8. This earlier structure was almost entirely destroyed when Feature 5 was built over it. Excavations in Feature 8 revealed it was a rectangular pithouse simply dug into the ground, without plastering or otherwise finishing the floor. However, two shallow holes had been dug into that floor. One appears to have been a storage pit inside the house. The second was below an ashy layer of soil heavily disturbed by burrowing rodents, and appears to have been dug through the fill of both houses after they were abandoned.

Feature 6 was a small, oval pithouse facing the west. The dirt filling this house also was gray and very compact. Digging down to the floor we encountered chunks of daub (burned mud), and beneath those a thin layer of sandy silt alluvium.

Artifacts in Feature 6 ranged from a few sherds and chipped stone pieces in the eastern portion, near the entryway, to a heavy concentration of cobbles, core-hammerstones, and broken ground-stone artifacts just inside the doorway. These rocks lay within and beneath the fallen remnants of the roof or walls, but the base of the core-hammerstone cluster appeared to be resting directly on the floor, suggesting that the house was still standing and being used for storage or for disposal of trash when its roof fell in.

Our excavations in the other pithouse, Feature 7, revealed a hearth well plastered with mud, and a ramped, 1½-meter-wide entryway that faced the east. The soil filling this house was gray from mixed-in ash, and extremely compact ( earning the site its rock hard moniker). Very few artifacts, and no charcoal or burned daub were found in it, but a thin lens of ash blanketed the floor, suggesting that the structure had burned. It appears to have been cleaned out before fire destroyed it, though, and the relative lack of artifacts in the fill above its floor may indicate that Feature 7 was the last house occupied at the Rock Hard site.

Other Features. The small, low trash mound at the site was designated Feature 3. Old Pueblo’s partial excavation of it revealed a more-or-less homogeneous mixture of pottery and other household trash, plus earth and fire-cracked rocks that had been cleaned out of one or more roasting pits. The site’s two roasting pits and surface rock ring already had been thoroughly investigated by Pima College in March, so Old Pueblo did not focus any field effort on them. However, charcoal-rich soil collected by Pima from one of the roasting pits will be analyzed along with the collections and data obtained during Old Pueblo’s excavations.

- Jeffrey Jones and Allen Dart
Courses to Be Offered for Arizona Archaeological Society Certification

OLD PUEBLO ARCHAEOLOGY COOPERATES WITH STATEWIDE ORGANIZATION

Old Pueblo Archaeology Center will begin offering courses this summer for credit through the Arizona Archaeological Society's Certification Program. This program is designed with the help of professional archaeologists to give training in various aspects of archaeology outside an academic degree program.

Because most of the AAS courses provide field experience in addition to classroom training, students can develop skills to make them qualified and valuable members of archaeological projects. To enroll in the Certification Program an individual must be an Arizona Archaeological Society member. An AAS Certification Program application form is completed, and the enrollee pays a one-time Certification Program fee of $10.00.

When the application is accepted AAS establishes a file to maintain the enrollee’s permanent qualifications record. As each course is completed, a certificate is issued stating that the individual is certified in the course’s aspect of archaeology.

To register for courses described to right of this column call (520) 798-1201.

WHAT IS THE ARIZONA ARCHAEOLOGICAL SOCIETY?
The Arizona Archaeological Society is a statewide nonprofit organization formed to preserve, study, and investigate the prehistoric and historical heritage of the Southwest. As a member, one may join any of the Society’s many statewide chapters. Members receive The Arizona Archaeologist, an annual book-length publication, and The Petroglyph, a monthly newsletter devoted to chapter activities, archaeological opportunities, and educational information.

Chapter activities may include regular meetings plus field trips and volunteer excavation and lab projects. AAS’s state-level meetings three times each year in various communities also provide opportunities to gain new insight into archaeology in different parts of Arizona.

For more information about AAS send your name and address to: Arizona Archaeological Society, PO Box 9665, Phoenix AZ 85068

Southern Arizona AAS Chapters
The Santa Cruz Valley Chapter, serving the Nogales-to-Tucson and surrounding region, is headquartered in Green Valley. Contact: Jeanne Neal, (520) 625-6569.
The Cochise Chapter serves southeastern Arizona and is based in Sierra Vista. Contact: Donn Ivey, (520) 458-5563.

OLD PUEBLO’S AAS COURSES COMING UP

Prehistory of the Southwest
This 20 hour lecture course provides a basic overview of archaeology in the Southwest. It incorporates discussions of cultural sequences, dating systems, subsistence strategies, urbanization, abandonment, and the general characteristics of major Southwestern cultural groups.

Fee: AO member $28, nonmember $35
Time/Dates: 5-9 p.m., Thurs. & Tues., July 18, 23, 25, 30, & August 1

Survey Techniques
Archaeological survey includes seeking out and evaluating archaeological sites, determining their locations, and preliminary mapping. This course teaches how different kinds of surveys are organized, how to use map and compass, & how to recognize, evaluate, and map a site. 20 hrs classroom + 40 hrs fieldwork.

Classroom hours fee: AO member $28, nonmember $35. Additional fieldwork hours fee: AO member free, nonmember $35
Classroom Time/Dates: 5-9 p.m., Tuesdays, September 3 - October 1
Field Time/Dates: 7-3:30 Saturdays, September 7 - October 5

Field Crew Member I
This course prepares the student to become a valuable member of an excavation crew. It covers the basic tools used (backhoe, shovel, trowel, screen, etc.), how to collect samples for lab tests (pollen, flotation, radiocarbon, dendrochronology, etc.), and, most importantly, site record-keeping. 30 hrs classroom + 40 hrs fieldwork.

Classroom hours fee: AO member $42, nonmember $52.50; Additional fieldwork hours fee: AO member free, nonmember $189.00
Classroom Time/Dates: 6-9 p.m., Thursdays, September 5 - November 7
Field Time/Dates: To be arranged after September 5

Other Courses to Be Arranged
The Archaeology Opportunities program provides volunteer fieldwork and lab opportunities, so AO members’ volunteer hours may count toward certification in other AAS courses listed in the box (left). Persons who have completed Sabino Canyon Ruin or Continental site courses may be able to have those hours count toward AAS coursework requirements for the “Field Crew Member I” and other AAS courses.

OLD PUEBLO’S AAS COURSE LOCATIONS:
Classroom sessions: Old Pueblo Archaeology Center, 1000 E. Fort Lowell Road
Field sessions: Sabino Canyon Ruin and other Tucson-area sites

Courses Offered in the AAS Certification Program
Prehistory of the Southwest
Advanced Southwest Archaeology
Survey Techniques
Field Crew Member I
Field Crew Member II
Recorder
Rock Art Recorder
Laboratory Techniques I
Pottery Technology
Stabilization and Reconstruction
Writing Preliminary Report
Archaeological Mapping Techniques
Historic Archaeology
Pottery Analysis of the Flagstaff Region
Prehistoric Architectural Analysis
Advanced Southwest Archaeology
Workshops and Seminars
Weekend Archaeological Excavation & Lab Workshops at the Sabino Canyon Ruin

On coming weekends, and on weekdays by special arrangement, Old Pueblo Archaeology Center is offering educational, exciting, and fun workshops in southwestern archaeology. These programs are being held in Tucson at the Sabino Canyon Ruin, the site of a prehistoric village that Hohokam Indians inhabited between A.D. 1100 and 1300.

In 16 hours over two days, enrollees are provided with background in the prehistory and history of southern Arizona through hands-on field and laboratory experience in archaeology.

With guidance from professional archaeologists at the Sabino Canyon Ruin, workshop participants learn to identify Precolombian artifacts, architectural features, and other evidence of prehistoric human occupations. They also get to see for themselves how archaeological excavation preserves scientific information about animal bones, plant remains, and soils associated with buried artifacts, so all of the recovered information can be studied further after the dig is completed.

Besides developing archaeological excavation skills, workshop registrants learn proper procedures for cleaning, classifying, analyzing, and interpreting ancient cultural materials in Old Pueblo’s archaeology laboratory near the Sabino Canyon Ruin, in a classroom of the Fenster School of Southern Arizona.

The 2-day workshop starts with a brief indoor lesson on methods of archaeological dating, different kinds of Hohokam archaeological sites, the Sabino Canyon Ruin, and how to recognize Hohokam Indian artifacts. Then it’s into the field to learn and practice archaeological excavation techniques.

Ten to 11 hours are devoted to archaeological excavation and field recording, and four hours to artifact cataloging, cleaning, labeling, and sorting in the archaeology laboratory. One-day and three-day options are also available.

This workshop has been approved for teacher salary credit by several Arizona school districts, under the course title Archaeology in the Schools, Level 1. (It is also open to nonteachers.) Teachers taking the workshop are provided with materials that show how archaeology can be used to apply math, science, and art skills, and how it integrates the sciences, humanities, and arts for fuller understanding of human cultures. These educa-

Hohokam pottery vessels from the Sabino Canyon Ruin. These artifacts, unearthed during excavations at the ruin during previous years, are now in the collections of the Fenster School of Southern Arizona, owner of the property where they were discovered.
The Archaeology Opportunities Program

Archaeology Opportunities is a program for persons who want archeological research experience, training, and the thrill of discovery! Archaeology Opportunities members get to participate in field excavation and survey projects, and assist with studies and reconstruction of pottery and other artifacts in the archaeology laboratory. Membership benefits include:

- Opportunities to participate in Old Pueblo Archaeology Center’s excavations, field surveys, and other research programs.
- 20% discounts on Old Pueblo’s publications and other items.
- A subscription to the Old Pueblo Archaeology quarterly bulletin.
- Invitations and discounts for field trips and other archaeology events.

Archaeology Opportunities is an outgrowth of Old Pueblo’s Sabino Canyon Ruin program, an archaeological field school operated cooperatively with the Fenster School of Southern Arizona to provide excavation opportunities and training for volunteers and students. The program’s professional archaeologists provide hands-on instruction in field, laboratory, and interpretive techniques.

Important features of the field school learning experience include the use of proper archaeological excavation and survey methods.

As they discover ancient artifacts and cultural features, participants learn how to use degree-reading compasses, optical mapping equipment, and the metric system, and practice proper archaeological recording methods such as sketching, photography, keeping of field notes, and artifact cataloging.

Persons who complete a basic three-day Sabino Canyon Ruin field school program automatically become Archaeology Opportunities members for a full year. A yearly fee option for enrollment and membership renewal is also available as indicated below.

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**Annual Dues & Processing Fees**

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**Archaeology Opportunities Enrollment/Old Pueblo Archaeology Subscription Form**

Name (Mr., Ms. Mrs.)

Address

City, State, Zip

Area Code & Phone:

Enclosed is my payment for:

Archaeology Opportunities membership (Category: ) $ 

Nonmember Old Pueblo Archaeology bulletin subscription only ($5.00/year) $ 

Additional donation to Old Pueblo Archaeology Center $ 

TOTAL ENCLOSED $ 

If you are requesting a Household, Contributing, Supporting, or Sponsoring membership, please list the names of all household members who will participate in Archaeology Opportunities programs in the box at right.

Please mail form with payment to Old Pueblo Archaeology Center, PO Box 40577, Tucson AZ 85717-0577

Questions? Call Old Pueblo at (520) 798-1201
Inside: Archaeology Opportunities for Volunteers!

Are you an Old Pueblo Archaeology subscriber?

If this issue came to you free, or the date on its preprinted address label is not later than this issue’s publication date, you need to subscribe or become an Archaeology Opportunities member in order to receive future issues. See page 7 for subscription and membership information.

Archaeologists at the Arizona State Museum (The University of Arizona) may have opportunities for volunteers to help with an archaeological stabilization project at a Hohokam platform mound site north of Tucson later this summer. Call John H. Madsen at (520) 621-2096 for details.

Volunteers may be needed to help with archaeological excavations at a large Archaic period site in southern Arizona’s Tortolita Mountains this August and September. If you would like to participate call Barbara Roth at Oregon State University: (541) 754-4256.