

### FOR YOUR SAFETY

We have made efforts to make your visit a safe one, but there are natural features here that could be hazardous, such as steep slopes, falling rocks, spiny vegetation, and poisonous reptiles.

Please stay on trails and remain alert—especially if small children are in your party.

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

**National Park Service**  
**U.S. DEPARTMENT OF THE INTERIOR**

# Tonto

NATIONAL MONUMENT • ARIZONA



Though the desert seems harsh, it can provide a good living for people clever in utilizing its resources. The Salado Indians were such a people. They farmed the desert, gathered its wild foods, and built their villages along the Salt River on high ridges and in hill caves. The Salado, whose name comes from the Spanish for "salty", were a Pueblo Indian people, one of the many related groups of the great Pueblo tradition of Arizona, New Mexico, Utah, and Colorado. They lived in the Tonto Basin between about 1100 A.D. and 1400 A.D., building and occupying the Tonto cliff dwellings during the last century of this period.

#### THE SALADO PEOPLE

They were of average size, the men being about 1.7 meters (5.5 feet) tall, the women, about 1.5 meters (5 feet). They probably looked much like today's Zuni and Hopi Indians: light brown skin, rather coarse, straight, dark brown hair, and brown eyes. Their faces were small and short, the features delicate. Often their heads were slightly flattened in the back, a consequence of spending their infancy on a hard cradleboard. They seem to have had much dental trouble, probably because the large amounts of grit in their stone-ground food wore away their teeth.

Clothing was simple in this mild climate. For women, yucca-string skirts, fiber sandals of yucca or agave to help in walking about the rocky, thorny, hot desert, woven cotton headbands and carrying bags, and in winter probably cloaks or

The opening picture shows the original wall and roof construction of a family room.

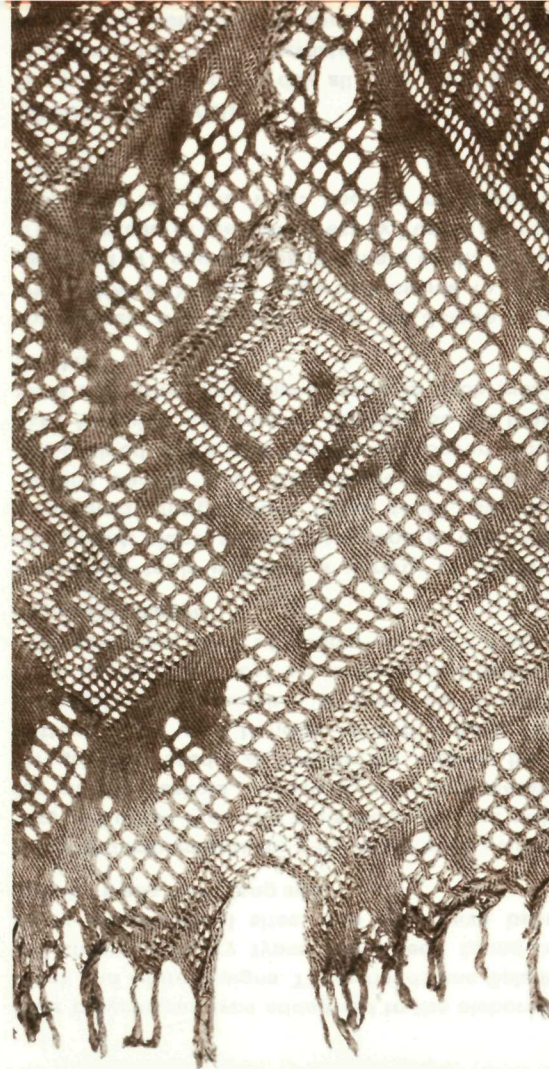
blankets of cotton. Men's sandals were much the same as the women's, and the men wore cotton breechcloths and sometimes elaborately woven cotton shirts. It is possible that small children went entirely unclothed except for tiny versions of the adult sandal. Many ornaments were worn: shell bracelets and pendants, stone beads, turquoise pieces; even elaborate tattooing may have been done. Salado women must often have worn their hair very short, since it was cropped for string and cordage; the men apparently wore the elaborate hairstyles in this society.

#### THEIR HOMES

Salado archeology is not well known except at Tonto. It is believed that the Salado moved into the Tonto Basin at about A.D. 900, coming from the drainage area of the Little Colorado River to the North. The Salado lived in small, compact pueblos (villages) along the river edges until the middle 1200s when they began moving to defensible ridgetops. The move to the caves apparently began in the early 1300s.

Three Salado villages, built in natural caves high above the Salt River, are preserved at Tonto National Monument. These cliff dwellings are now called the Upper Ruin (containing about 40 rooms), the Lower Ruin (20 rooms), and the Lower Ruin Annex (12 rooms).

The villages are crudely constructed of stone and mud. Some sections are two and three stories high. Because the caves offer protection from the elements, the villages have been preserved for



more than 600 years. Each wall was built in sections about 0.6 meter (2 feet) high of unshaped quartzite stones taken from the fractured cliffs and mudded in place. When the mud for one course was dry, another 0.6-meter-high section was added. Walls were not bonded to each other. At roof height, usually 1.8 meters (6 feet), a large main beam was placed across the long axis of the room, with smaller cross-beams then placed on top. Reeds, grass, or saguaro cactus ribs were the next layer, and the final layer was 15 to 20 centimeters (6 to 8 inches) of mud.

The furnishings in a Salado household were minimal: just mats on the floor for sitting and sleeping, and blankets of hide or woven cotton. Baskets and jars were for storage and cooking; a small clay-lined firepit in the floor was both furnace and cookstove. Tools of all kinds for hunting, weaving, farming and other activities were kept in the rooms until needed. Apparently most daily activities took place outdoors, on the roofs and in the back of the caves; the dark, and rather stuffy rooms were used primarily for sleeping, storage and shelter in bad weather.

In Room 14 of the Upper Ruin, which apparently accidentally burned while still occupied, archeologists found a firepit. Nearby were two jars and a pottery bowl, a fragment of matting, a charred ring basket, and the base of a large coarse-coiled basket. Lying close together were the charred fragments of a bow and arrow, and two clubs. They may have been tied to the vigas (rafters)

Tonto cotton shirt, a fine example of Salado weaving.

and fell with the burning roof. Another fragment of matting and other tools were found near the walls, as though kept there, out of the way, until needed.

### THEIR LIVELIHOOD

The Salado were farmers, growing crops of corn, pumpkin, squash, several varieties of beans, cotton, and grain amaranth in irrigated fields on the Salt River floodplain. Their irrigation canals were still visible until Roosevelt Lake flooded the area 60 years ago. They cultivated pig-weed (grain amaranth) for food. Its archeological occurrence at Tonto is the earliest evidence of its having been raised as a cultivated plant requiring irrigation.

Though the Salado were a farming people, they made good use of wild plants and animals in this Lower Sonoran Desert. About half of their food came from wild sources, and so also did their medicines, cosmetics and household necessities. They used large amounts of cactus fruit, the beans of mesquite and catclaw acacia, juniper berries, pinyon nuts, jojoba nuts, acorns, hackberry fruits, and the flower buds of agave, beargrass, yucca and sotol. Soap and shampoo came from the root

of the yucca; fiber for sandals, basketry, skirts, cordage and other things came from yucca, agave and beargrass. Wild plants were undoubtedly used for medicines, though we do not know the manner of their application nor for what disorders they were used. Wild game made up an appreciable part of the Salado diet. Animal bones frequently found in the ruins include those of deer, pronghorn, jackrabbit, cottontail and gray fox. Bones of bobcat, cougar, badger, prairie dog, porcupine and quail were also found. Game animals were often taken with the bow and arrow, but were also netted, snared and clubbed. A complete bow and 26 arrows were found with a burial in the Lower Ruin.

### THEIR ARTS

The many fragments of fine cotton textiles found in the Tonto cliff dwellings show that weaving was an outstanding Salado craft. They grew their own cotton, dyed it, and wove many handsome fabrics for trade and for their own use. Wooden loom tools, spinning sticks and spindle whorls have been found in the ruins. A beautifully woven lace-like cotton shirt found at Tonto is one of Southwestern archeology's better artifacts.

Polishing stones, yucca-fiber paint brushes and other tools for making pottery have been found in the ruins, along with thousands of broken pieces of pottery and some whole bowls and jars. The Salado made a plain red utility ware for everyday use but their painted pottery is elaborate and handsome. A bowl of Gila Polychrome, the most common of the Salado painted pottery types, would be basically a plain red bowl with a black and white geometric design on its interior. A

later polychrome type added red to the elaborate black and white designs. These handsome Salado polychrome pottery types have been found in many archeological sites, and may have been popular trade items long ago.

Tools and implements for daily living were usually very well made. Women's tools included bone awls for making baskets, the stone mano and metate for grinding seeds, and tools for making their pottery. They used bundles of stiff grasses for hairbrushes, and bunches of grass for brooms. Their babies were kept on cradleboards padded with soft inner bark of juniper—a sort of early disposable diaper.

The men's tools included a variety of hunting equipment: clubs, snares, bows and arrows, and arrowshaft straighteners. Other tools used for various chores were hammerstones, mauls of fine-grained stone, and handsome grooved stone axes. Weaving was done by the men, so the loom tools and other implements were in each man's tool kit.

Tonto Basin was abandoned by the Salado soon after 1400 A.D. Their departure seems to have been part of a general abandonment of the southern mountains of the Southwest by Pueblo people. Why they left, and what became of them, is unknown.

### ABOUT YOUR VISIT

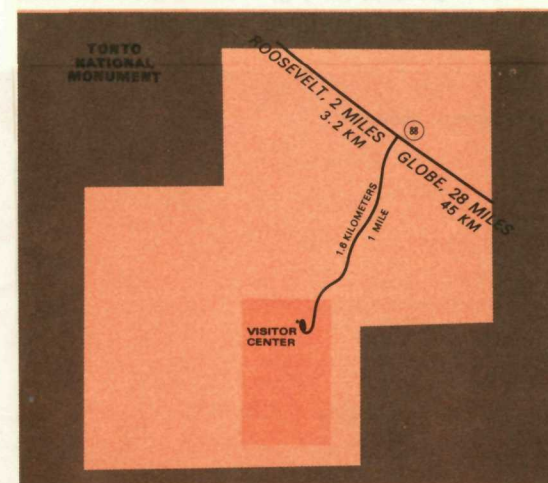
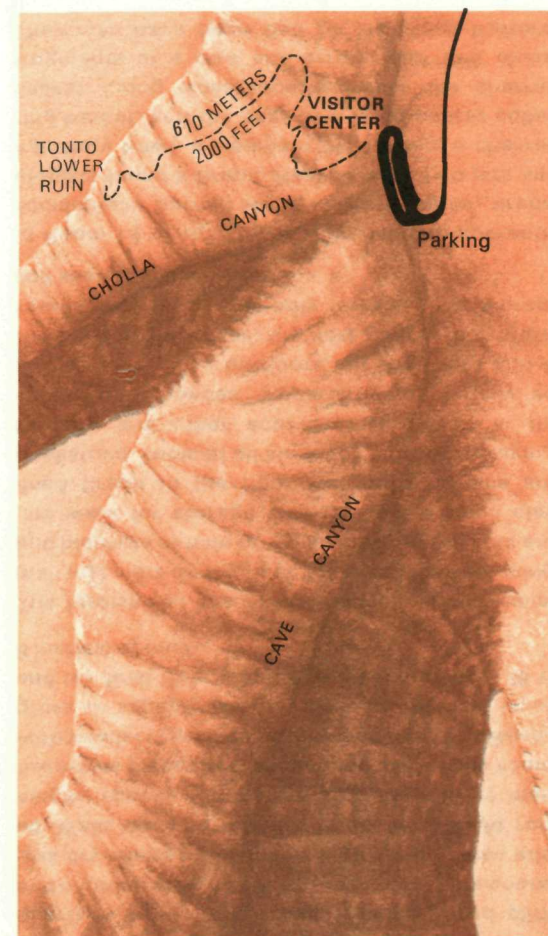
The park is open every day all year, from 8 a.m. to 5 p.m.; the most comfortable weather is between late October and early June. Picnicking facilities are available in the park, and numerous campsites can be found in the surrounding Tonto National Forest. Food and lodging are available in Roosevelt, at Roosevelt Lake Resort, and in the Globe-Miami area.

From Phoenix, take U.S. 60-70 to Apache Junction; turn left on Ariz. 88 and proceed along the scenic Apache Trail—40.3 kilometers (25 miles) of which is unpaved mountain road—to Roosevelt. The visitor center is 4.8 kilometers (3 miles) beyond Roosevelt. Average driving time one way from Phoenix is 2-1/2 hours. From Globe-Miami, take Ariz. 88 to the park entrance, a distance of 45.1 kilometers (28 miles), driven one way in about 45 minutes.

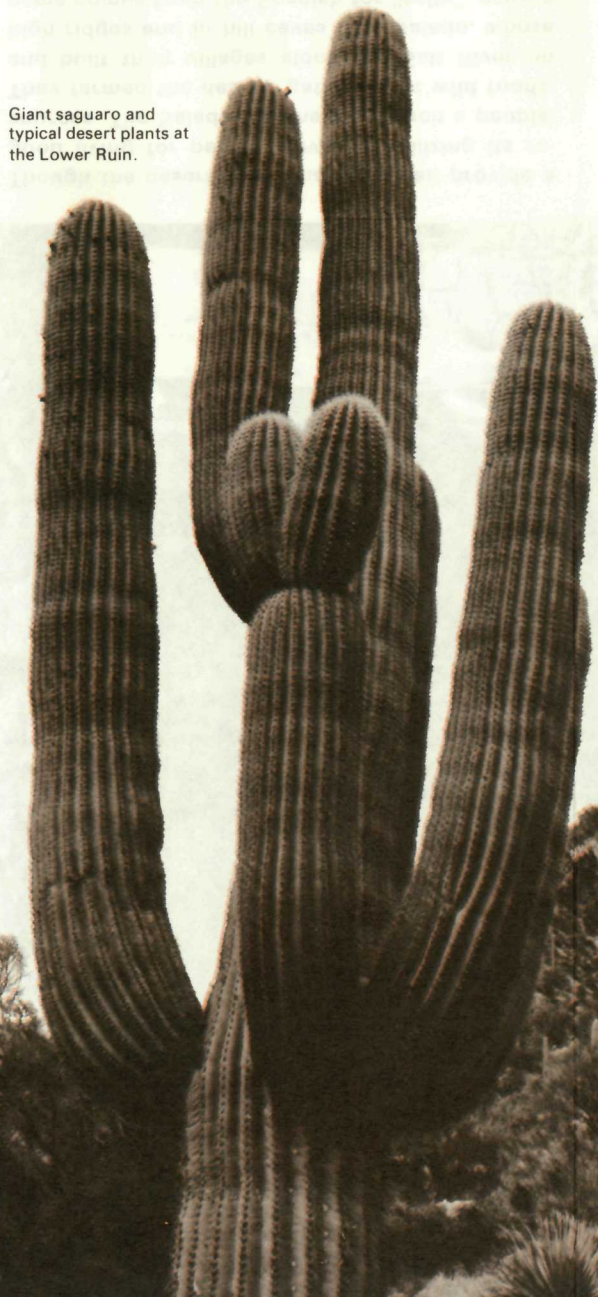
The park turnoff brings you directly to the visitor center, where you can see items made and used by the Salado; consult Park Service personnel about your visit; and begin the self-guiding trail to the Lower Ruin. (This trail is closed at 4:00 p.m. each day.)

As you walk to the Lower Ruin you will see the same species of desert plants as those used by the Salado—barrel cactus, saguaro, jojoba, sotol, cholla, yucca and many others. With luck, you will also see some of the birds and other wild creatures which make the desert their home.

If you wish to visit the Upper Ruin, you must make arrangements 5 days in advance for the rough, 4.8-kilometer (3-mile), 3-hour round trip hike.



Giant saguaro and typical desert plants at the Lower Ruin.



Black-on-white Salado ware pottery bowl.

### WE'RE JOINING THE METRIC WORLD

The National Park Service is introducing metric measurements in its publications to help Americans become acquainted with the metric system and to make interpretation more meaningful for park visitors from other nations.

### ADMINISTRATION

Tonto National Monument is administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is P.O. Box 707, Roosevelt, AZ 85545, is in immediate charge.