

15 CENTS IF YOU TAKE THIS BOOKLET HOME

Nalakihu- Citadel Trail



WUPATKI NATIONAL MONUMENT
ARIZONA



Nalakihi as seen from the south.

NATIONAL PARKS AND MONUMENTS

Wupatki National Monument is one of nearly 300 areas administered by the National Park Service, United States Department of the Interior. These include magnificent areas set aside for their scenic, scientific, and historical values, and they belong to you and are a part of your heritage as American citizens.

The National Park Service has the responsibility of preserving the Parks and Monuments in their natural, unspoiled condition and of making them available for your enjoyment in such a manner as to leave them unimpaired for the enjoyment and inspiration of future generations. In order to achieve this high purpose, such destructive activities as woodcutting, hunting, grazing, mining and even flower-picking are prohibited. We hope you will join us in protecting Wupatki National Monument by taking only pictures and inspiration, and leaving only footprints and goodwill.

HELP KEEP AMERICA BEAUTIFUL

Nalakihu-Citadel Trail

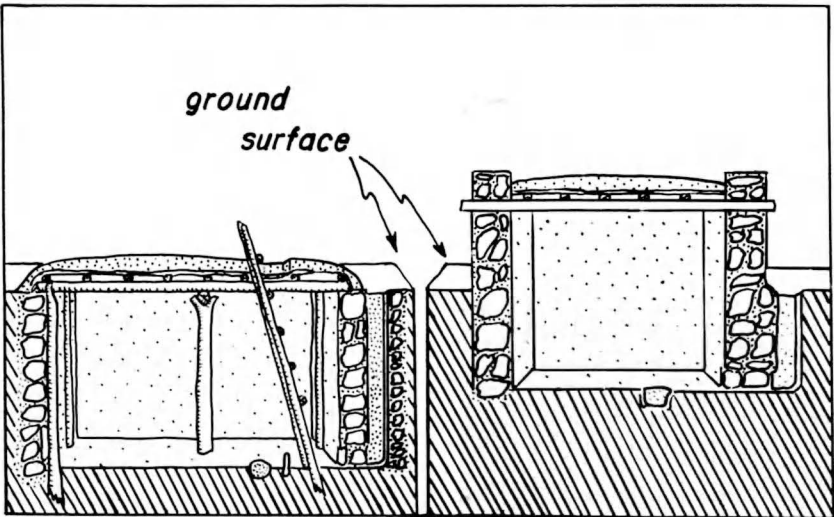
This booklet will guide you through Nalakihu (nah-LAH-kee-hoo), the small excavated surface pueblo near the parking area, and the Citadel, the large fortified, unexcavated structure on top of the butte. The trail is short and will lead you around to the rear of the Citadel, passing a large limestone sink, and to the top of the butte, where you may obtain a magnificent view of the surrounding country and see many other ruins from this vantage point. Numbered stakes on the trail correspond to numbered paragraphs in this leaflet, which will assist you in your understanding of this area and its early people.

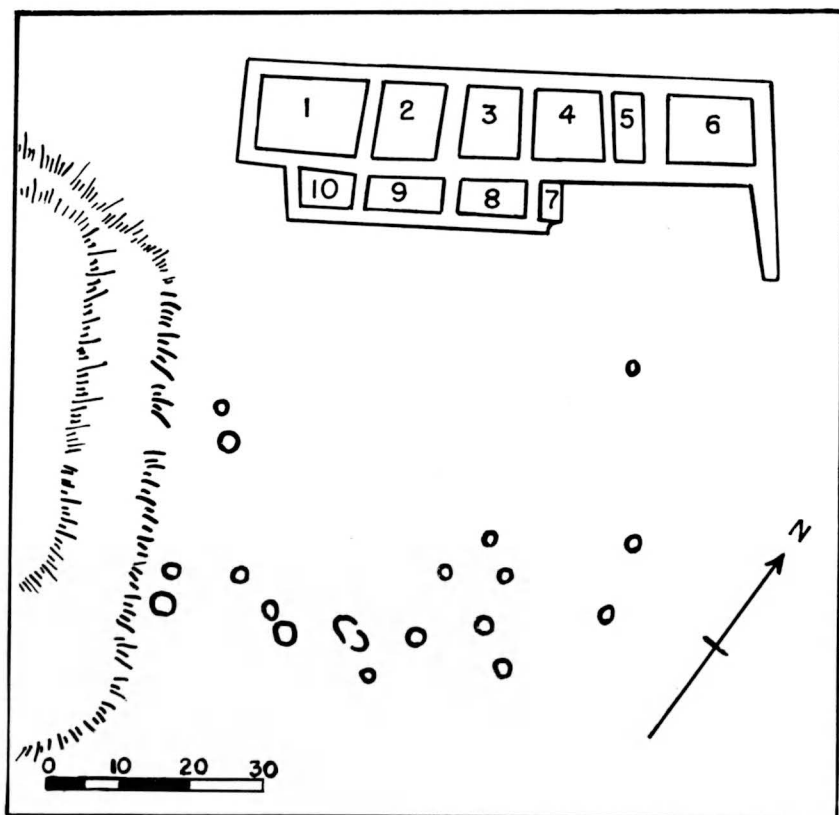
We ask that you please keep off the ruin walls, and do not remove any pottery fragments, rocks, plants or other material from the area. Thank you.

1 This unexcavated, rectangular pithouse structure was of a type used by some of the inhabitants of the area prior to A.D. 1125.

Surface masonry architecture was not adopted by this tribe (archeologists call them the Sinagua — see-NAH-wah) until the early 1100s at which time their neighbors to the north, a tribe which scientists named the Anasazi (the Old People), introduced above-ground masonry structures to this region.

Reconstruction of two types of pithouses found in this region. Note the two methods of roofing and the ventilator at right.



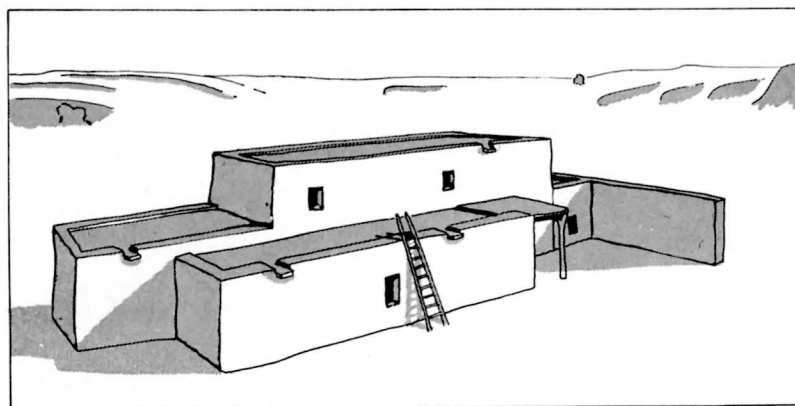
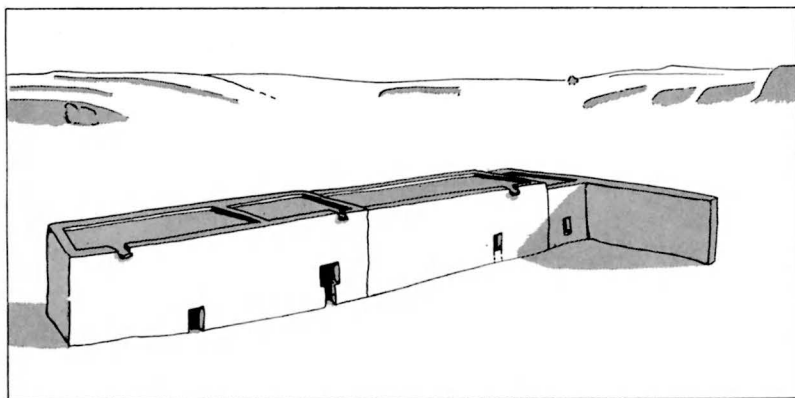
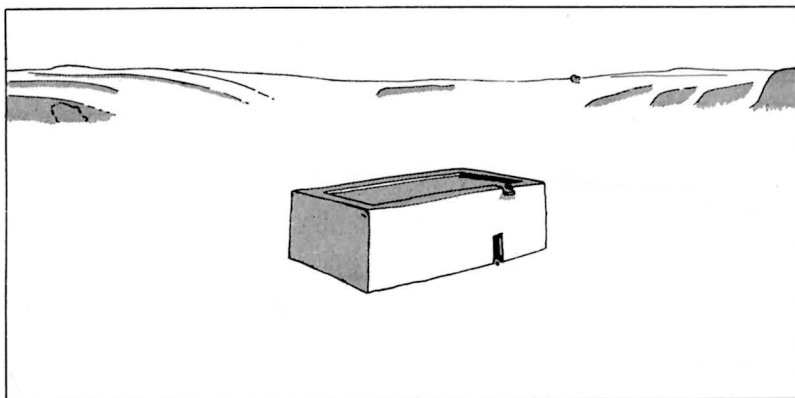


Ground plan of Nalakihi.

2 Nalakihi is a Hopi word meaning "Lone House" or "House Standing Alone." This pueblo had 10 rooms on the ground floor, 3 or 4 more rooms which formed a second story, providing a home for about 25 to 30 people.

A charred roof beam of ponderosa pine, lying on the floor of the first room, gave a tree-ring date of A.D. 1183, indicating that this little pueblo was built in the late 1100s. Dates of 1192 and 1260 have been obtained on wood from the Citadel above which would cause us to believe that both pueblos were built at approximately the same time.

By observing how the walls of various rooms butt against each other we can deduce that the rooms at the secondary doorway constitute the oldest part of the pueblo, because these walls were erected at one time and the other walls butt against them. When these three rooms constituted the whole pueblo, it was probably a one-family house.



*Three possible constructional stages through which Nalakihiu may have passed.
(Hatchways are omitted and drains are merely guesswork.)*



Metate (or mealing grindstone) resting on collapsed roof material in Room 1. There is a mano, or handstone, in it.

The three rooms in front of Nalakihi had no firepits and apparently were used for storage. The same applies to rooms 5 and 7. The remaining rooms had firepits and other features indicating they were dwelling rooms, such as ventilators to bring in fresh air at floor level, deflectors to keep draft of incoming air off firepits, and in room 4, loom holes to anchor the lower horizontal bar of a vertical loom.

Arrangement of metates (grinding stones) found on floor of Room 1.



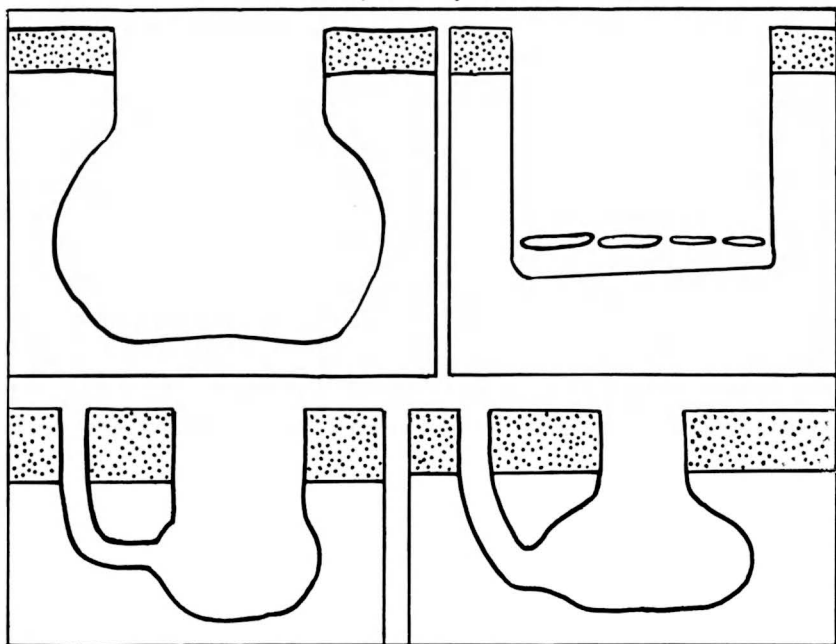
3 (Please enter inner room.) Roofs in Nalakihi had a main beam spanning the room's shorter axis, with the rafter poles crossing it. Over these, narrow wooden shakes and sometimes stone slabs supported another layer of reeds, branches, bark, or grass, and 3 or 4 inches (7.5 or 10 cm) of clay. Two collapsed roofs were found in each of four rooms so we know a second story once existed over the central portion of the pueblo.

Note the T-shaped doorway through which you passed and also the occasional lines of black volcanic rock in the walls which probably were not for decoration because some courses in the building were covered with plaster.

4 You are now standing on the upper of two terraces. Exactly what they were used for we are not sure, but they may have been "kitchen gardens" similar to those in use today in some of the Hopi villages.

Below the terraces to the right of Nalakihi, archeologists discovered an unusual group of 6 burials and 16 storage, roasting or burial pits. Most of the pits were jar-shaped, some had vertical sides, and there were two pit ovens with flues, sort of teapot-shaped, with the spout actually being the flue. Three of the six burials were those

Cross-sections of various pits near Nalakihi.





Archeologists work carefully to uncover a portion of collapsed roof.

of infants in shallow pits, some lined with stone slabs. Only a bowl or a few sherds (pieces of broken pottery) were placed with them for grave offerings. These pits have been backfilled and are not visible today.

Pits 9 and 10 in which a few sherds, and bones of common raven, bighorn, and mule deer were found.





Rocks standing on edge in Citadel Ruin are the remains of walls that collapsed intact.

The Sinagua buried their dead with the body extended full length while the Anasazi buried them in a flexed position with the knees drawn up toward the chest.

The people who used these pits may have attached religious significance to owls, for only owl bones were found here. Winona Ruins south of here along U. S. Highway 66 produced only hawk bones.

Please stay on the trail.

5

You are standing in a circular ring of volcanic rock outlining a room. On the slopes of Citadel Butte are several similar round or rectangular outlines, none of which have been excavated. There is another just above you, and several below.

6

The structure above is a fortified pueblo built on a small remnant butte of volcanic origin. Note the loop holes. Through the higher of these openings defensive warriors could shoot with bow and arrow. The lower ones at floor level were airvents.

The black rock around you is basalt, formed by the cooling of molten lava. Its color is due to the presence of iron minerals.

7

The valley below was the farming area used by the early inhabitants of not only the Citadel and Nalakihi, but of many other



The Citadel, as seen from the west.

villages, the ruins of which you may observe on the surrounding mesas. How many can you count? There are at least eight visible.

8

Note the way the walls of the Citadel follow the outline of the volcanic cliff upon which the structure is built. Again the loop holes are quite evident. The structure was probably two stories high on this side, which exhibits the best example of the masonry at this site.

Citadel Sink with the San Francisco Peaks in the background, as seen from Citadel Ruin.

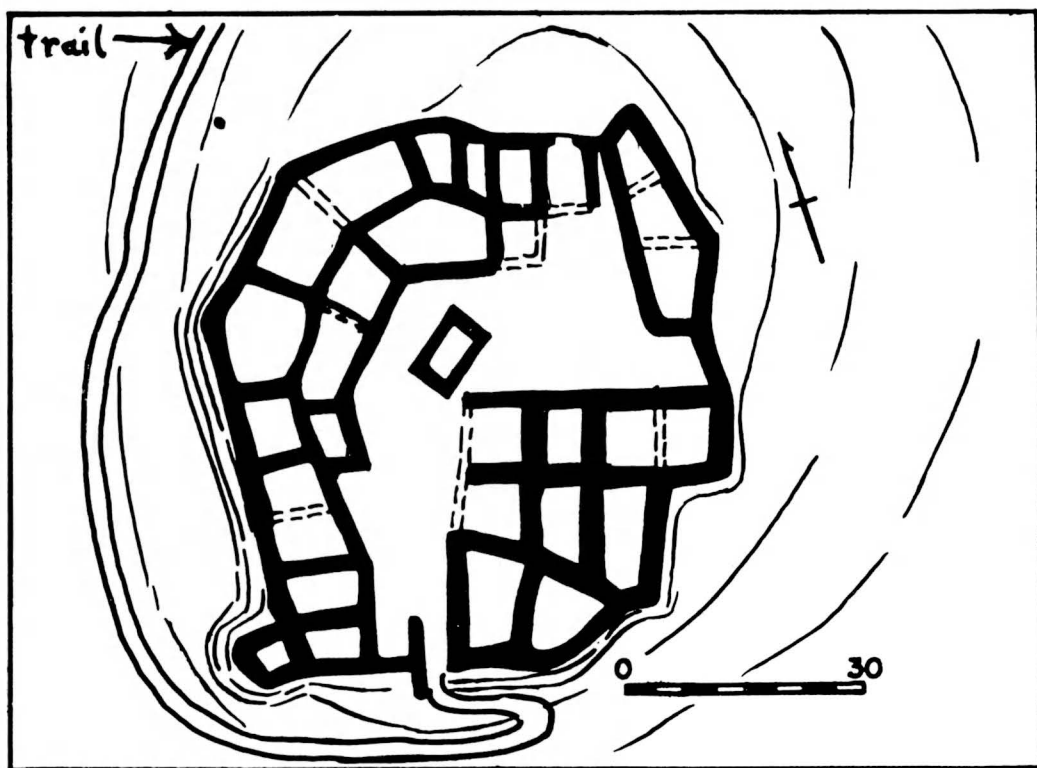


9 This limestone sink in the foreground was formed when the roof of a cavern in the Kaibab Limestone collapsed, probably plugging the outlet and allowing a pond to form. There is another sink 2 miles (3.2 km) to the south, and ruins are clustered around its edge also. The thick Kaibab Limestone forms the greatest portion of the walls of the sinkhole. It is stained by seepage from the overlying red Moenkopi Sandstone, a thin layer of which can be seen at the base of the black lava which forms the surface.

10 You are now entering the Citadel by an entrance utilized by the Indians of yesteryear. Note the loop hole guarding this entrance.

11 This ruin has never been excavated. It might tell a story of peaceful farming people finding it necessary to defend themselves from neighboring tribes. Around the depression in the middle there is space for an estimated 30 rooms; the outlines of some can readily

Ground plan of the visible walls of the unexcavated Citadel.



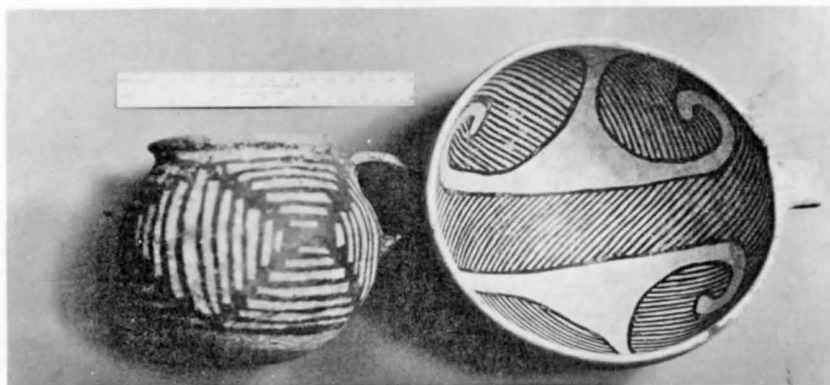


Pottery from cremation burials, a mug, pitcher, and a ladle.

be seen. Approximately 50-60 persons probably lived in this village.

Most of the broken pottery found on the Citadel's slopes is of the type made by the Anasazi, a prehistoric tribe which once lived to the north of here. Nalakihi's pottery, however, was only one-third Anasazi, the other two-thirds being of the Sinagua and Prescott tribes. The latter lived to the south and west. Different people who were drawn to this region by the good farmlands created by the cinder cover that fell with the eruption of Sunset Crater in A.D. 1065, lived together as neighbors in this region, thus accounting for the different types of pottery in the ruins.

Black-on-white pitcher and bowl funeral offerings.





Clay pot lid, showing imprints of beans and corn husks.

12 Almost all of the dwellings were occupied for only a short period. When the winds finally duned up the black cinders and blew them off into the arroyos and the springs dried up, the people had to move to a more productive location to grow their crops. We believe that the Anasazi moved north into the Tsegi Canyon country while the Sinagua moved south into the Verde Valley and east to Chavez Pass near Winslow by the middle 1200s.

Every litter bit hurts!

13 You can see why the early people utilized this vantage point for the construction of a fortified pueblo. Today, we can thank them for a magnificent view of the surrounding country. In the distance can be seen the San Francisco Peaks, O'Leary Peak, Sunset Crater, Painted Desert, Gray Mountain, and numerous volcanic cones, remnants of the San Francisco volcanic field, over 2 million years old.

The structures you see from this point represent only a few of the more than 800 sites found within Wupatki National Monument. The largest ruin in this area is Wupatki ruin, 9 miles (14.5 km) to the southeast. Wupatki, which has been excavated, housed about 250 persons during its period of occupation. A visit to Wupatki is well worth your while.

14 We hope you have enjoyed this trail. *Please Return This Booklet to the Register Stand Before You Go, or You Can Purchase It by Dropping 15 Cents in the Coin Slot.*

GENERAL INFORMATION

Sunset Crater is the most recent volcano among the 400 in the Flagstaff region, and is located 18 miles (29 km) south of here. It is one of the few prehistoric volcanoes in the world that we can accurately date (another being Mt. Mazama, where now is Crater Lake, Oregon), and one of the few that had such a pronounced effect upon people living in the area. When it erupted it covered almost 800 square miles (2080 sq km) including the Wupatki area, with fine black volcanic ash. This eruption took place *before* the masonry pueblos in this region were built.

When the eruption was over, a few individuals probably returned to this area and found, to their surprise and pleasure, they were able to mature crops in locations where they hadn't been able to farm before. The thin layer of volcanic ash acted as a moisture-retaining mulch; the people could plant their seeds in the underlying soil and the cinder cover would hold enough moisture to insure them a good harvest.

When this word spread around, it created a great land rush, the only one we know of in the Southwest. Large numbers of Indians from all over this part of the Southwest swarmed into the region of the cinder fall to take advantage of the new farming land. The Hohokam came from the south, the Mogollon from the southeast and the Anasazi from the north.

The main concentration took place between A.D. 1100 and 1200, and during that time the area between the San Francisco Mountains and the Little Colorado River was inhabited by perhaps 8,000 Indians.

The abandonment of the area is as interesting as the occupation. Tree-ring evidence indicates that from about A.D. 1215 to 1300 there was a long drought of varying intensity which culminated in the great drought of 1276-1299. Winds accompanying the drought turned the area into a dust bowl, moving away the moisture-retaining cover of cinders that the people had depended upon for their farming. The people left as farming acreage decreased.

The Anasazi element apparently moved north or east into the Tsegi Canyon or Hopi country, while the Sinagua moved south into the Verde Valley and east to the Chavez Pass region near Winslow. By the mid-1200s Wupatki probably was completely abandoned.

The National Park Service invites you to come again!

CONSERVATION — YOU CAN HELP

If you are interested in the work of the National Park Service, and in the cause of conservation in general, you can give active expression of this interest, and lend support by alining yourself with one of the numerous conservation organizations which act as spokesmen for those who wish our scenic and historic heritage to be kept unimpaired for the enjoyment of future generations.

Names and addresses of conservation organizations may be obtained from the ranger.

ADDITIONAL POINTS OF INTEREST

This region is one of the most interesting archeological and scenic localities in the United States. Sunset Crater National Monument is 18 miles (29 km) to the south of Wupatki National Monument, and was the source of the black volcanic ash which had such profound effect on the prehistoric farmers. Twenty-one miles (34 km) farther to the south is Walnut Canyon National Monument, a beautiful canyon and rim setting for hundreds of ruined homes of prehistoric Indians who also were influenced by Sunset Crater's ash. Farther to the south, in the Verde Valley (noted as Great Drought refuge areas) are Tuzigoot and Montezuma Castle National Monuments (the latter including Montezuma Well).

**This booklet is published in cooperation with the National Park Service
by the
SOUTHWEST PARKS AND MONUMENTS ASSOCIATION**

*A non-profit publishing and distributing organization
supporting historical, scientific and educational activities
of the National Park Service.*

**We recommend the following items for
additional information on the Southwest:**

SHRUBS AND TREES OF THE SOUTHWEST UPLANDS, Elmore and Janish. New and accurate popular guide to identification of 168 species and varieties of representative shrubs and trees from 4,500' elevation to timber line. Line drawings for each species, and 36 full color photos. 216 pp., color-coded pages for different altitude levels, paper.

YOUR NATIONAL PARK SYSTEM IN THE SOUTHWEST, IN WORDS AND COLOR. Jackson. 500 word articles on each National Park Service area in the huge Southwest region, with full-color photograph for each of 66 areas listed. Highly authoritative treatment with every text checked for accuracy by National Park Service. Also contains "How to Get There" appendix. 76 pages, 69 full-color illustrations, color cover, paper.

ARCHEOLOGY ON THE SHONTO PLATEAU, NORTHEAST ARIZONA, Keith Anderson. 1969. Scholarly report on archeological salvage work in 1963-4 along the new road right-of-way between U.S. Highway 64 and Navajo National Monument headquarters. Includes appendix report on Bird Remains from Vicinity of Navajo National Monument, by Lyndon L. Hargrave, XII plus 68 pp., 2 maps, 14 tables, 10 line drawings, 21 half-tones.

100 DESERT WILDFLOWERS IN NATURAL COLOR. Dodge. Descriptions and full-color portraits of 100 of the most interesting desert wildflowers. Photographic hints. 64 pp., full-color cover, paper.

100 ROADSIDE WILDFLOWERS OF SOUTHWEST UPLANDS IN NATURAL COLOR. Dodge. Companion book to author's 100 Desert Wildflowers in Natural Color, but for higher elevation flowers. 64 pages and full-color cover, paper.

FLOWERS OF THE SOUTHWEST MESAS. Patraw and Janish. Companion volume to the Desert flowers booklet, but covering the plants of the plateau country of the Southwest. 112 pp., color cover, paper.

FLOWERS OF THE SOUTHWEST MOUNTAINS. Arnberger and Janish. Descriptions and illustrations of plants and trees of the southern Rocky Mountains and other Southwestern ranges above 7,000 feet elevation. 112 pp., plus 4-color centerfold, color cover, paper.

MAMMALS OF SOUTHWEST MOUNTAINS AND MESAS. Olin and Bierly. Companion volume to Mammals of Southwest Deserts. Fully illustrated in exquisitely done line and scratchboard drawings, and written in Olin's masterfully lucid style. Gives description, range, and life habits of the better known Southwestern mammals of the uplands. Color cover, paper or cloth.

POISONOUS DWELLERS OF THE DESERT. Dodge. Invaluable handbook for any person living in the desert. Tells the facts about dangerous insects, snakes, etc., giving treatment for bites and stings and dispels myths about harmless creatures mistakenly believed poisonous. 48 pp.



Write For Catalog
**SOUTHWEST PARKS AND MONUMENTS
ASSOCIATION**

339 South Broad Street
Box 1562 - Globe, Arizona 85501

