

# Saguaro



*National Monument*

A R I Z O N A

# Saguaro

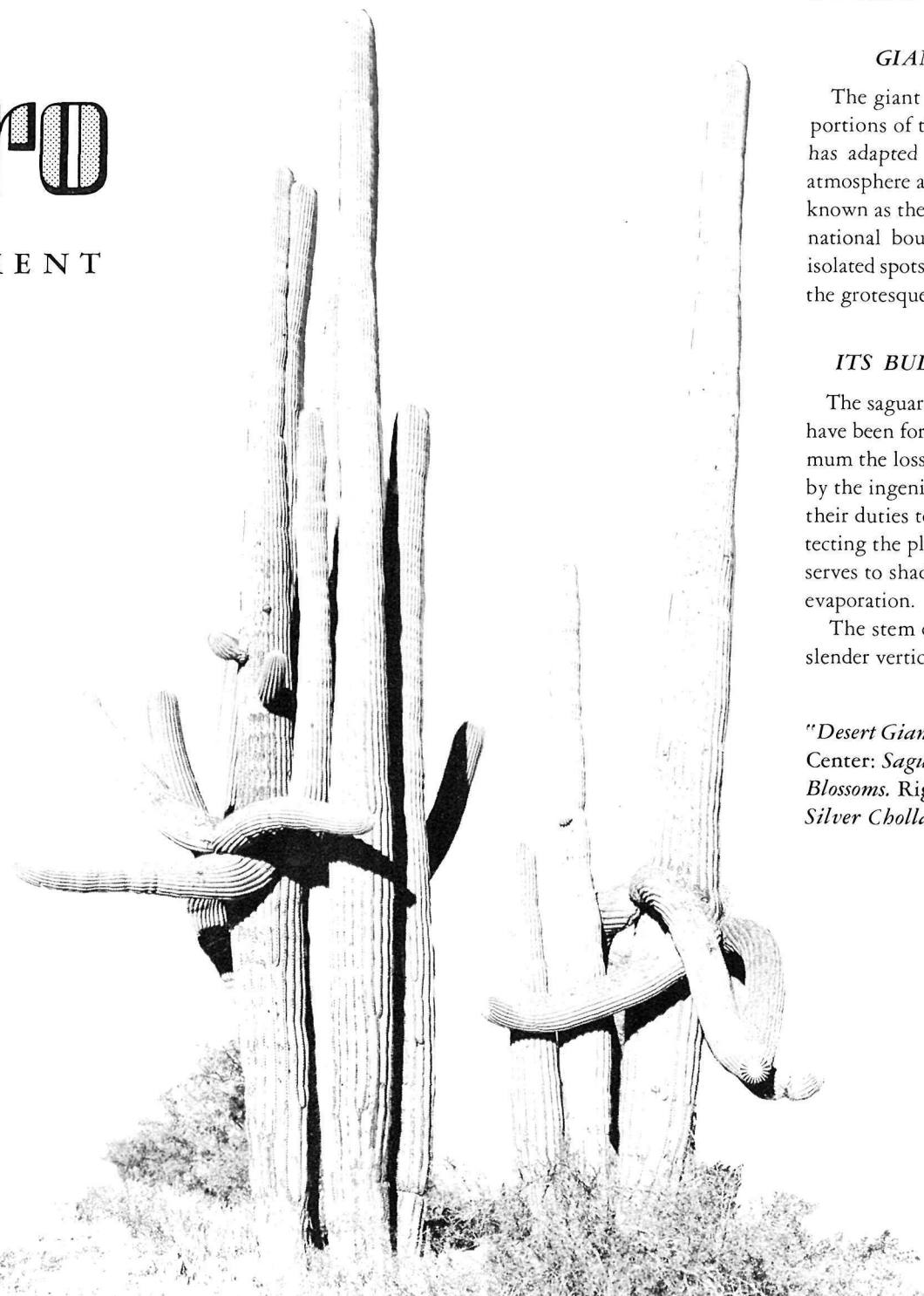
## NATIONAL MONUMENT

*A weird forest of fluted cacti towering over undergrowth of typical Sonoran Desert vegetation, amid spectacular surroundings dominated by three massive mountain ranges.*

"A WILDERNESS OF UNREALITY" is the dense leafless forest of massive columnar cacti which covers the undulating desert, 17 miles east of the historic old city of Tucson. Limited in its range to northwestern Mexico and southern Arizona, this amazing desert giant, the saguaro, reaches its maximum size and densest stand at the foot of the Tanque Verde Mountains. In a majestic setting of arboreal desert, frowned upon by the scarred and furrowed slopes of three mountain ranges, the famous Cactus Forest seems a bizarre bit of another world transplanted to this sphere.

Like people in a crowd, the giant cacti are all similar, yet no two exactly alike. Grotesque rather than beautiful, there is a weird feeling of friendliness in each massive, awkward hulk. The imaginative person may find in many of them a strange resemblance to the figures of humans and animals, punctuation marks, and other familiar objects.

Spectacular at any season, the monument is especially beautiful during April when the desert is carpeted with a multicolored assortment of ephemeral wildflowers. And May brings blossoms of many varieties of smaller



cacti dwarfed by the towering fluted columns of the saguaros themselves, crowned with gleaming tiaras of creamy white blooms which later turn to brilliant scarlet, edible fruits.

### GIANT CACTUS RARE IN UNITED STATES

The giant saguaro is found only in the southern and southwestern portions of the State. Its real home is northwestern Mexico, where it has adapted itself to meet the difficult requirements of a parching atmosphere and month after month of rainless heat. This climatic belt, known as the Lower Sonoran Life Zone, extends north across the international boundary line. Here in southern Arizona and one or two isolated spots in southeastern California where soil and slope are suitable the grotesque forms of the huge cacti stipple the desert.

### ITS BULKY TRUNK A WATER STORAGE "TANK"

The saguaro is the product of severe arid conditions where the plants have been forced to develop water storage organs and reduce to a minimum the loss of moisture from their bodies. This the saguaro has done by the ingenious procedure of doing away with leaves and transferring their duties to the tough green skin. The heavy growth of spines, protecting the plant from animals which would eat it for its moisture, also serves to shade the outer skin and aid it in reducing such water loss by evaporation.

The stem of the giant cactus is composed of a skeleton of 12 to 30 slender vertical ribs supporting a mass of spongy tissues.

"Desert Giants."  
Center: Saguaro  
Blossoms. Right:  
Silver Cholla.



Following soaking rains, the widespread root system draws up immense quantities of water which are absorbed by the spongelike pulp. A mature plant, weighing from 6 to 10 tons, may take up as much as a ton of water following a rain. During extended dry spells, the saguaro gradually uses its stored water, shrinking in girth and weight and developing a wrinkled appearance due to drawing together of the vertical ridges or "pleats" in the stem. When the rains come, water is absorbed, and the stem, like an extending accordion, swells to assume a swollen, puffy form. Following seasons of excessive precipitation, such as the winter of 1940-41, occasional saguaros may take up so much water as to split open.

### HOW OLD IS SAGUARO?

Careful studies indicate that 200 years is probably a maximum. During its "childhood" a saguaro grows very slowly, a 30-year-old plant being not more than 3 or 4 feet tall. After that, growth is more rapid and a 75-year-old sapling may be 15 or 20 feet in height. About this time the tree begins to develop branches. Few saguaros have been recorded more than 50 feet in height.

### IT PROVIDES FOOD AND LODGING FOR ANIMALS

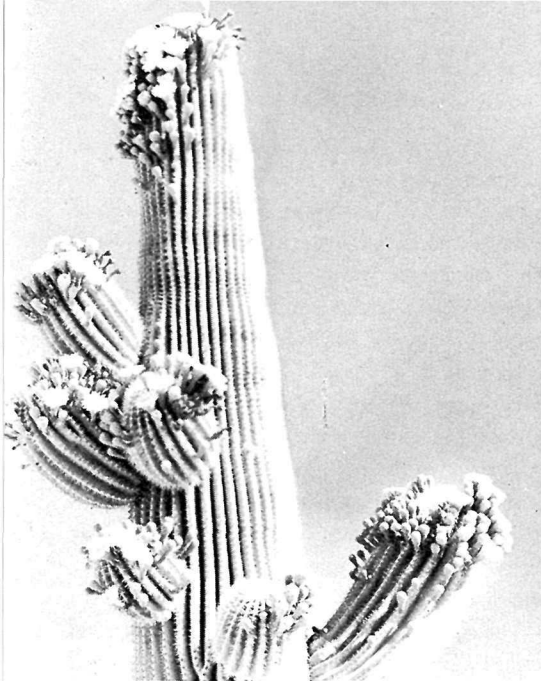
Fruits of the saguaro, which mature in mid-summer, split open, revealing the bright red pulp filled with glistening black seeds, and are often mistaken for flowers. The blossoms, however, are creamy white and appear in clusters at the extremities of the branches in May and early June. It is the official State flower of Arizona.

In early days, Pima and Papago Indians derived much of their subsistence from the fruits, consuming some of them fresh, and storing quantities in the form of pressed, dried cakes, or as syrup resulting from the boiled juice. An intoxicating beverage was, and still is, made from the fermented juice of fresh saguaro fruits, which are sometimes called pitahayas.

The ripe fruits are eagerly eaten also by several varieties of birds, particularly the white-winged dove, an important game bird of the Southwest. Some small mammals, such as chipmunks and ground squirrels, are able to scale the spined armor of the stems and reach the fruits at the extremities of the branches.

The Gilded Flicker, whose range is practically identical with that of the saguaro, and the Gila





*Saguaro in Bloom.*

woodpecker drill their nests (holes) in the fleshy stems of the saguaros. Sap oozing from the tissues forms a hard varnished lining for the deep pocket in the bottom of which the eggs are laid. After being used and abandoned by their owners, these nest pockets are appropriated by other birds such as the tiny elf owl or the desert sparrow hawk. Several species of larger birds, including the red-tailed hawk and the great horned owl, build bulky nests in the forks provided by the branches.

#### DESERT PLANTS AND ANIMALS OFFER MUCH OF INTEREST

Although the cacti, especially the great saguaros, are the most prominent vegetative feature of the landscape, there are numerous other forms of life which provide color and atmosphere. In April and May the desert washes are yellow with golden masses of bloom of the Palo Verde and mesquite trees, while hillsides flame with the brilliant red flower-tipped wands of the ocotillo. Among the cacti, several varie-

ties of cholla, prickly pear, and bisnaga, or barrel cactus, furnish strikingly spectacular evidence of nature's ability to develop plant forms to meet the requirements of a difficult climate.

Visitors to the cactus forest will see many varieties of desert birds. Present also, although rarely seen, are mule deer, peccaries (wild hogs), coyotes, badgers, ground squirrels, four varieties of rabbits, two species of foxes, and others.

There is much in the monument to interest the geologist, as well as the person with a flare for history. Close to the famous old city of Tucson, this region was the center of Spanish and Mexican activity in the early days. It was also the scene of American pioneer and settler warfare with the fierce Apache Indian raiders.

#### DEVELOPMENT OF AREA NOT YET COMPLETE

Although the scenic loop road through the monument (see map on back of this leaflet) is perfectly safe, it is by no means a graded or paved highway. There are several short but steep hills, and, following storms, the surface may be rough in places. Visitors should take this into consideration and drive with reasonable caution. Since fast driving makes impossible a thorough enjoyment of the numerous varieties of plant and animal life to be seen along the roadside, the slower rate of travel imposed is a boon rather than a handicap.

#### VISITOR SERVICE AND FACILITIES

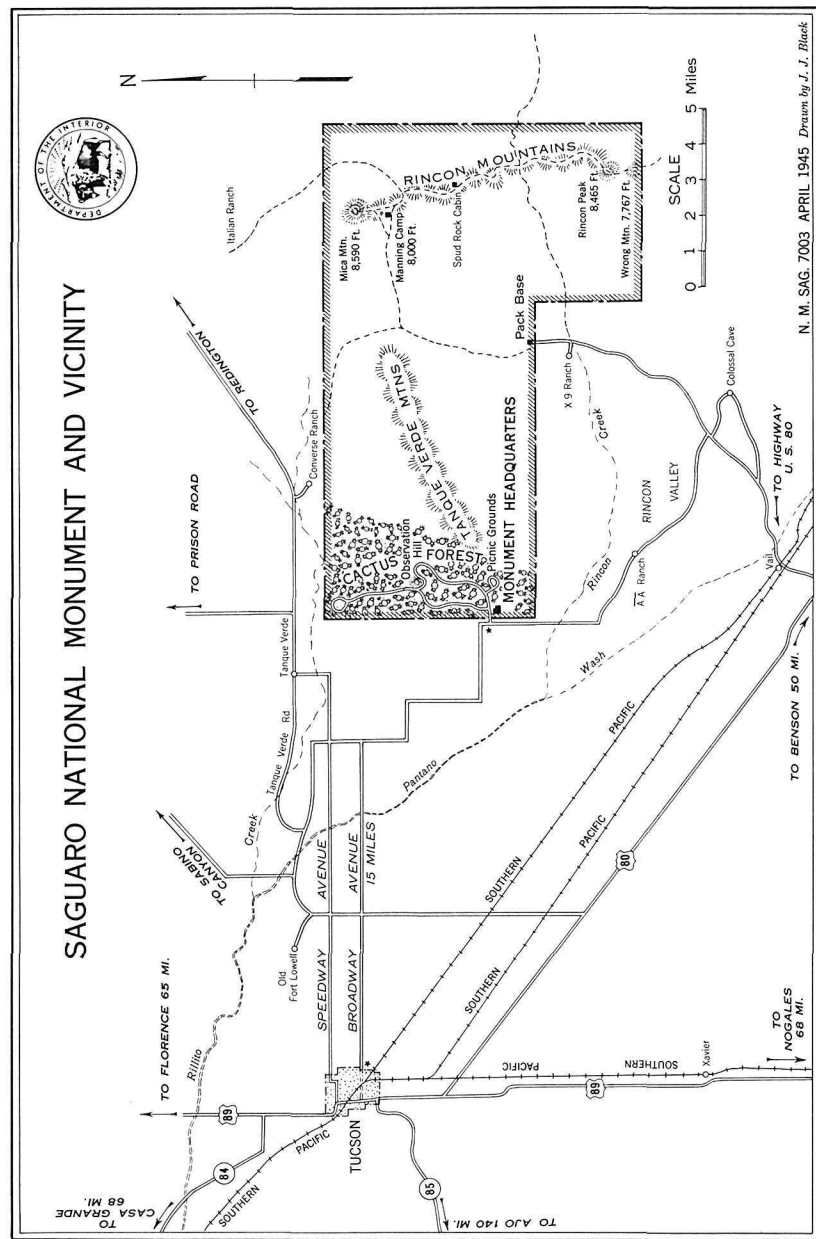
No water, gasoline, food, lodging, or other facilities are available in the monument. A picnic ground is provided (see map) but camping is not permitted. The monument is only 17 miles from Tucson, a modern city with every type of accommodation.

#### CACTUS FOREST OF NATIONAL IMPORTANCE

Because it is the climax of a desert type of plant life not found elsewhere in our country,

the cactus forest was preserved as Saguaro National Monument by Presidential proclamation on March 1, 1933. This area, totaling 53,669 acres is under the administration of the National Park Service, a bureau of the Department of the Interior. The local superintendent maintains

headquarters at the entrance to the monument and is usually available to provide informational service without charge. All communications should be addressed to the Superintendent, Saguaro National Monument, Route 8, Box 520, Tucson, Ariz.



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