

# Saguaro



**NATIONAL MONUMENT  
ARIZONA**

# Saguaro

## NATIONAL MONUMENT

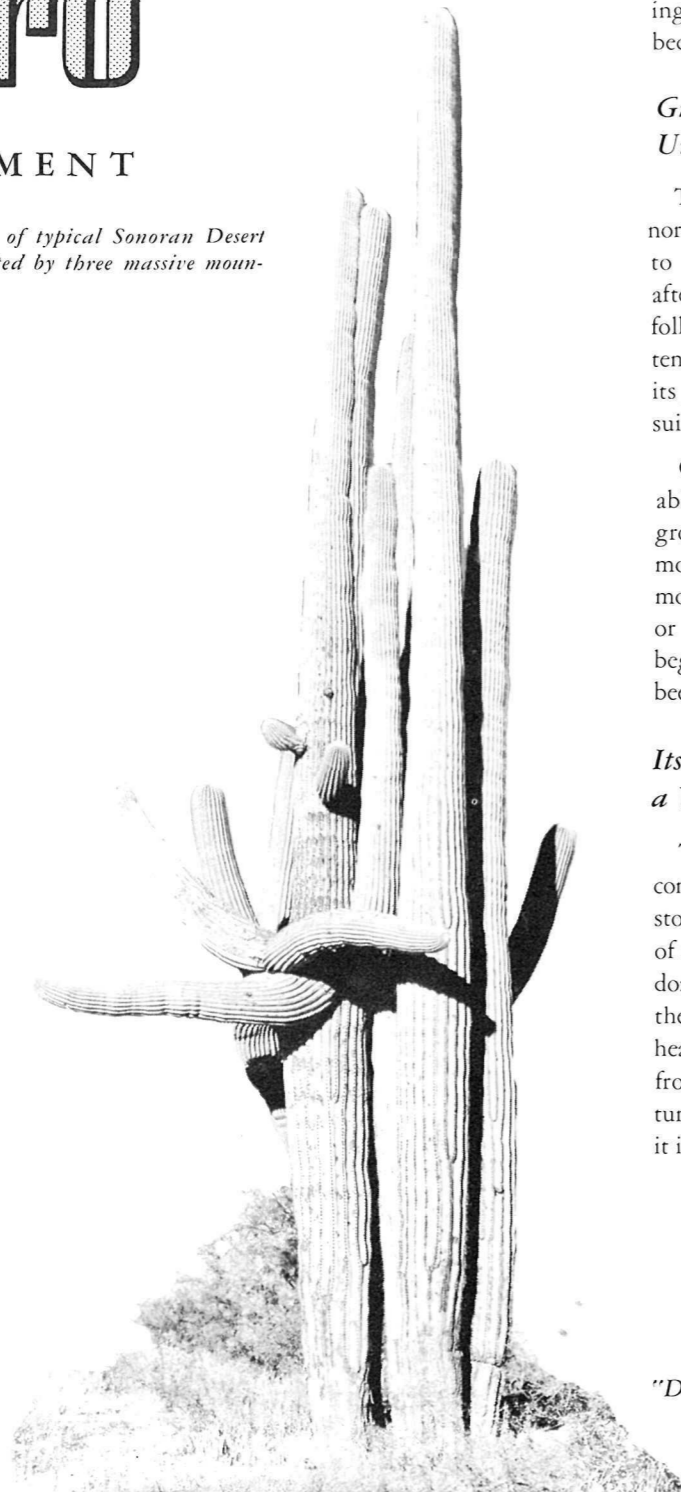
*A giant cactus forest towering over undergrowth of typical Sonoran Desert vegetation, amid spectacular surroundings dominated by three massive mountain ranges.*

"A wilderness of unreality" is the extensive forest of giant cactuses which covers the desert, 16 miles east of historic Tucson. Except for one or two isolated spots in southeastern California, the saguaro is limited in its range to northwestern Mexico and southern Arizona. This massive columnar cactus reaches its maximum size and greatest 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 cactuses are all similar, yet no two exactly alike. They are grotesque rather than beautiful, but there is a 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 short-lived wildflowers. And May brings cactus blossoms of many smaller varieties which

*The National Park System, of which this area is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of its people.*



are dwarfed by the towering fluted columns of the saguaros themselves, crowned with gleaming tiaras of creamy white blooms that later become edible fruits of brilliant scarlet.

### *Giant Cactus Rare in United States*

The giant saguaro grows most abundantly in northwestern Mexico, where it has adapted itself to meet the difficult requirements of month after month of parching dry heat. However, it follows the Lower Sonoran Life Zone which extends into Arizona, and stippled the desert with its grotesque forms wherever soil and slope are suitable.

Careful studies indicate that 200 years is probably the maximum age of a saguaro. At first it grows very slowly, a 30-year 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 cactus begins to develop branches. Few saguaros have been recorded more than 50 feet in height.

### *Its Bulky Trunk a Water Storage "Tank"*

The saguaro is the product of severe arid conditions in which the plants developed water-storage organs to reduce to a minimum the loss of moisture from their bodies. The saguaro has done this by not having leaves, transferring their function 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 water loss by evaporation.

*"Desert Giant."*

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

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 return, water is again absorbed, and the stem, like an extending accordion, swells to resume a swollen, puffy form. Following seasons of excessive rainfall, some saguaros may take up so much water that they split open.

### *Saguaro Used by Indians and 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



Center: Saguaro Blossoms. Right: Silver Cholla.

the ends 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 ends of the branches.

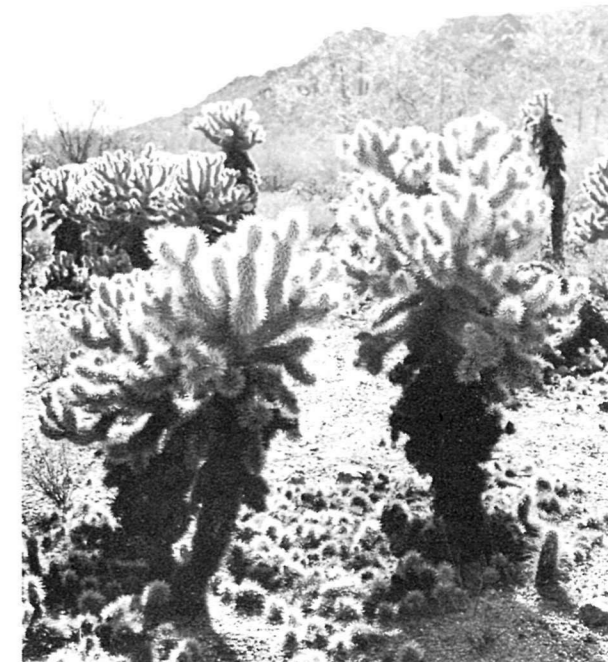
The gilded flicker, whose range is practically identical with that of the saguaro, and the Gila woodpecker drill nest holes in the fleshy stems of the saguaros. Sap oozing from the tissues forms a hard varnished lining for the deep pocket, in the bottom of which the eggs are laid. After being used and 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,

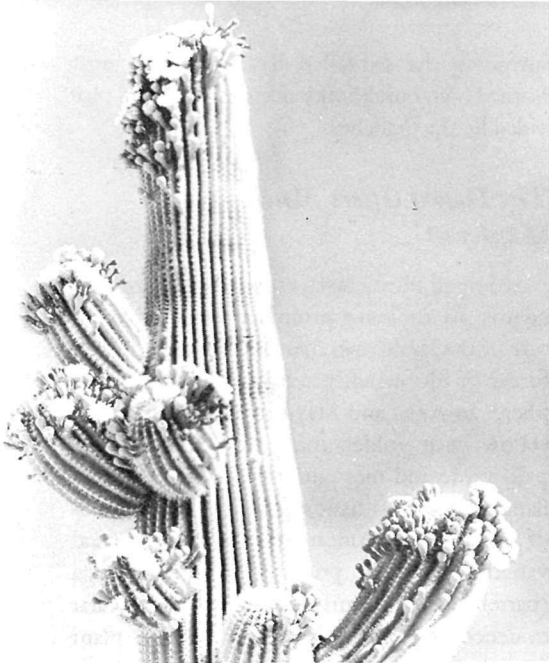
including the red-tailed hawk and the great horned owl, build bulky nests in the forks provided by the branches.

### *The Desert Offers Much of Interest*

Although the cactuses, 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 cactuses, several varieties of cholla, prickly pear, and bisnaga (barrel cactus) furnish strikingly spectacular evidence of Nature's ability to develop plant forms to meet the requirements of a difficult climate.

During your visit to the cactus forest you will see many varieties of desert birds. Present also, although rarely seen, are mule deer, peccaries, coyotes, badgers, ground squirrels, four varieties of rabbits, two species of foxes, and other mammals.





*Saguaro in Bloom.*

There is much in the monument to interest the geologist, as well as the person with a flair 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 Apaches.

**The Monument**

To preserve a superb sample of a desert type of plant life not found elsewhere in our country, Saguaro National Monument, with its magnificent cactus forest, was established by Presidential proclamation on March 1, 1933. The monument now has an area of almost 100 square miles.

**How To Reach the Monument**

The monument is located just east of Tucson and is easily reached by surfaced roads. The most direct approach is by East Broadway Avenue to the Old Spanish Trail which leads directly to headquarters at the monument entrance, a distance of 16 miles from Tucson.

**About Your Visit**

A picnic ground is provided in the monument, but no gasoline, food, lodging, or other facilities are available. In nearby Tucson, however, every type of accommodation can be obtained.

Although the one-way 9-mile scenic loop road in the monument (see map on back of this leaflet) is graded and surfaced, it is by no means a high-speed road. There are several short but steep hills and a few sharp curves. You should take this into consideration and drive with 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.

**Administration**

Saguaro National Monument is administered by the National Park Service of the United States Department of the Interior. A superintendent, whose address is Route 8, Box 350, Tucson, Ariz., is in immediate charge.

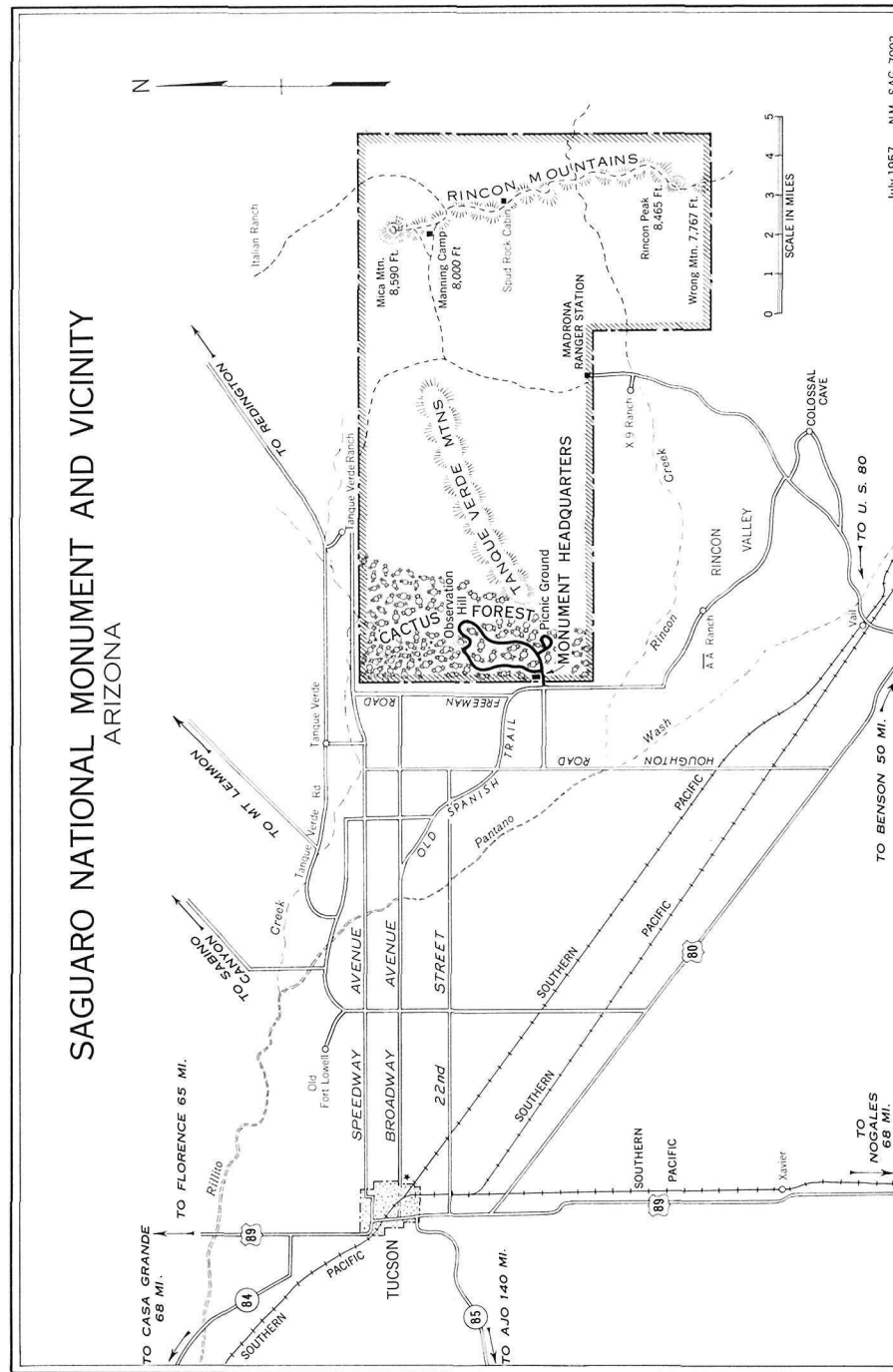


U. S. DEPARTMENT OF THE INTERIOR

Fred A Seaton, *Secretary*

NATIONAL PARK SERVICE

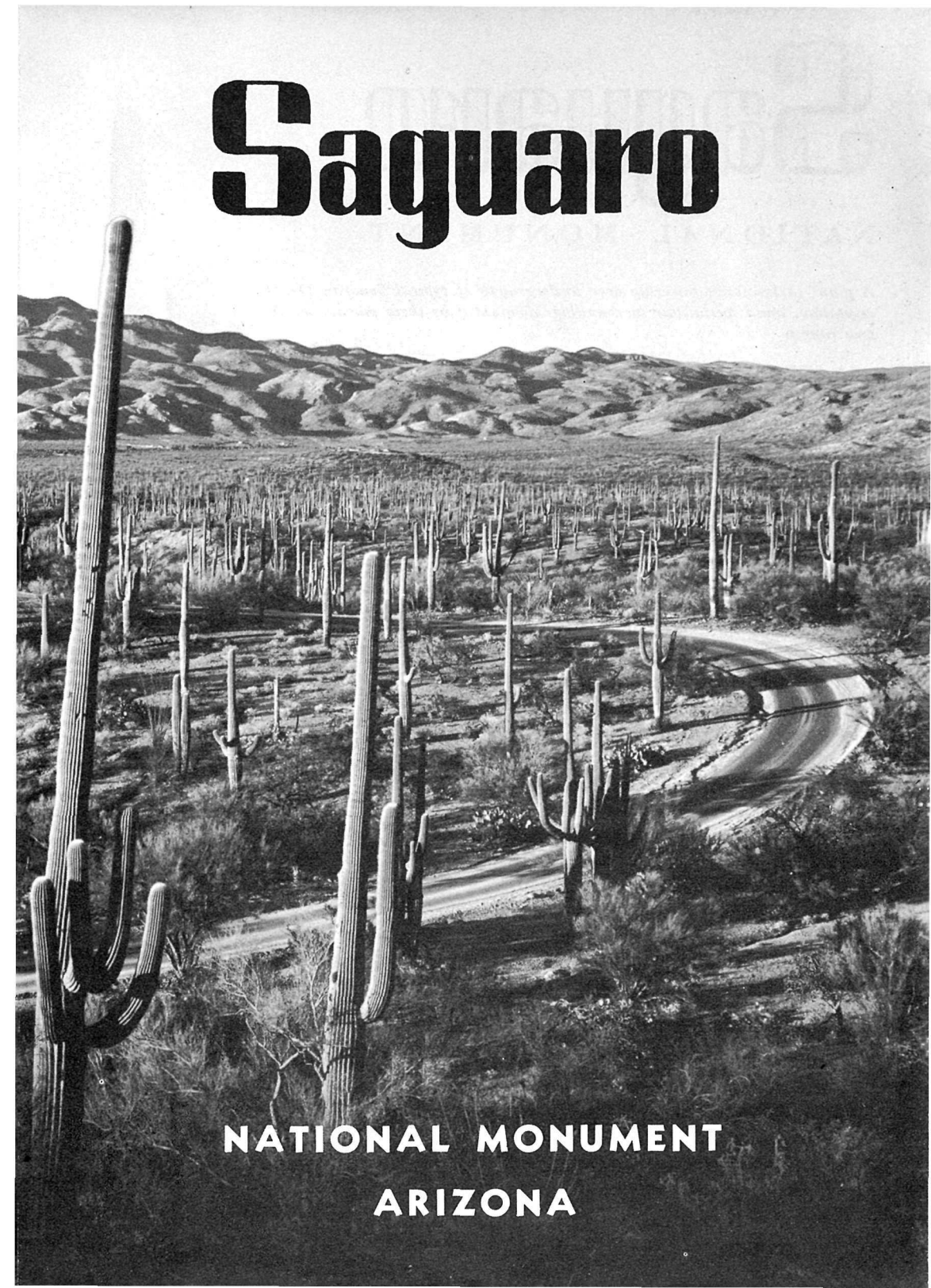
Conrad L. Wirth, *Director*



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COVER: *Cactus Forest of Saguaro.*  
Courtesy, Ray Manley.



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