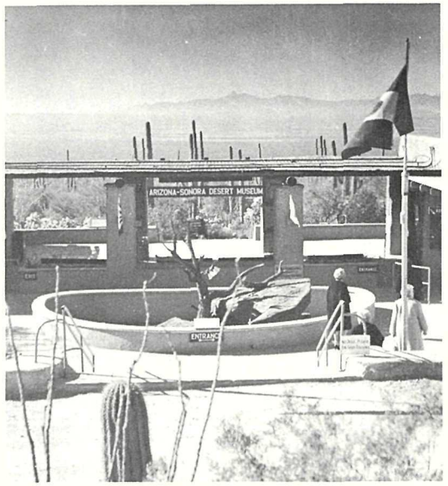
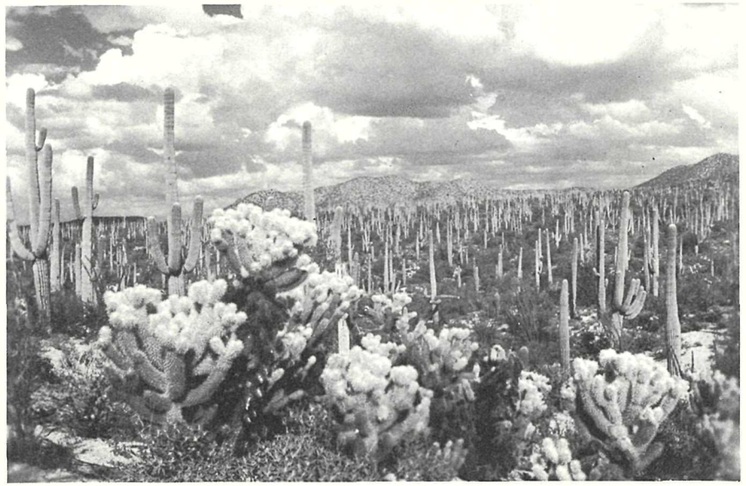
COURTESY ARIZONA-SONORA DESERT MUSEUM



Tucson Mountain section



The Tucson Mountain Section

The dense forest of vigorous young saguaros growing in the Tucson Mountain Section presents a striking contrast to the dwindling population of old giants in the original section of the monument. In addition to the impressive saguaro forest, several plants and animals common only to the western parts of the Sonoran Desert can be seen here. These include the tesota (desert ironwood), desert horned lizard, and small sidewinder rattlesnake.

You may easily reach the Tucson Mountain Section westward from Tucson via Speedway Boulevard and Gates Pass Road. And on the way you may wish to visit the Arizona-Sonora Desert Museum, a fascinating presentation of living plants and animals of the Sonoran Desert.

Within the 15,500-acre Tucson Mountain Section, well-maintained dirt roads lead to hiking trails, scenic overlooks, and other points of interest. There are four picnic areas, with tables, shelters, and restrooms, but water and firewood are not available.

Administration

Saguaro National Monument, established on March 1, 1933, and containing 78,644 acres in two sections, is administered by the National Park Service, U.S. Department of the Interior.

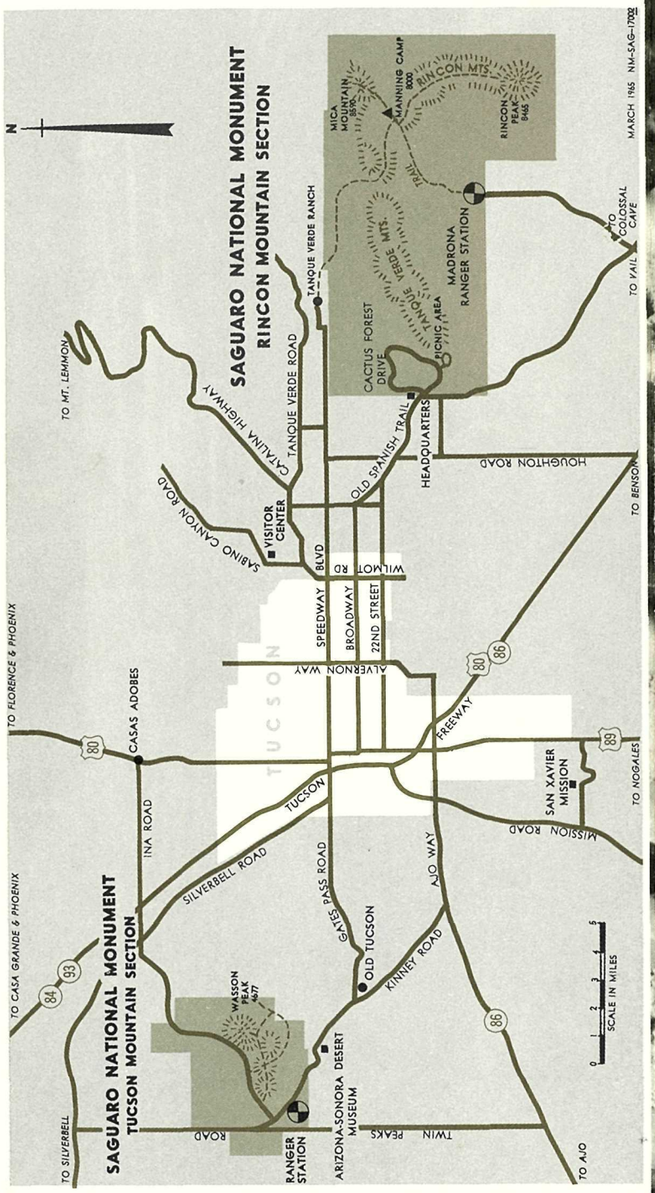
The National Park System, of which this area is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of the people.

A superintendent, whose address is Box 17210, Tucson, Ariz. 85710, is in immediate charge of the monument.

THE DEPARTMENT OF THE INTERIOR—the Nation's principal natural resource agency—bears a special obligation to assure that our expendable resources are conserved, that our renewable resources are managed to produce optimum benefits, and that all resources contribute to the progress and prosperity of the United States now and in the future.

U.S. DEPARTMENT of the INTERIOR — National Park Service

Revised 1965



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SAGUARO

SAGUARO NATIONAL MONUMENT • ARIZONA

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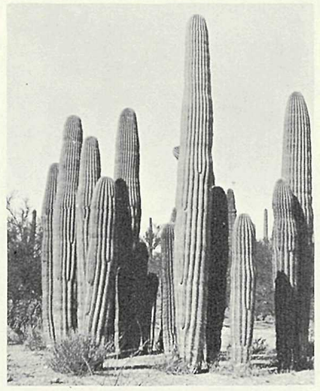


What to Do and See at the Monument

First, stop at the visitor center, where you will see exhibits explaining how the land acquired its profile and how the rocks and soil that make up the face of the land were formed. Other exhibits relate the story of man in the region, describe the desert's plants and animals, and tell the story of the saguaros.

Next, step outside the visitor center and look around you. In the foreground, you will see the spread of the desert, sweeping away toward the mountains. Studding the desert are thousands of stately saguaros, with lesser desert plants growing at their feet.

Beyond the desert flatlands rise the mountains: first the Tanque Verdes, with a fringe of scattered saguaros on their lower slopes. Beyond these the Rincons lift their forested ridges high above the desert.

Immediately before you is a 9-mile loop road through the saguaros of the flatlands, the Cactus Forest. Along this road are pullouts, where you can leave your car while you follow the short trails. The trails are labeled so that you may come to know the desert plants by name and sight and smell.

For the more hardy visitor, trails lead to the tops of the mountains, to an altogether different world from the desert. The 10-mile trail from Madrona Ranger Station to Manning Camp is one of the outstanding hiking and horseback trails in the Southwest.

Before setting out on one of these trails, check with a park ranger.

Here are a few reminders about regulations:

Leave plants, animals, rocks, and other features as you find them: undisturbed.

Observe posted speed limits.

Keep pets on leash, and out of buildings.

If you have a firearm, leave it in its case.

Deposit litter in containers provided.

Drive only on established roadways.

There are no facilities for camping, lodging, food, or gasoline in either of the two sections of the monument.

Plant and Animal Communities

The plants and plant communities of Saguaro National Monument are adapted to various degrees of temperature and rainfall—factors strongly influenced in turn by elevation.

At the Cactus Forest, the altitude is about 3,100 feet, the average July temperature is 94°F., and the annual rainfall is 3 to 11 inches. The plantlife represents that of the Sonoran Desert, which lies in northwestern Mexico (the state of Sonora) and extends into a small part of the southwestern United States.

In contrast, at the top of Mica Mountain the altitude is nearly 8,600 feet, the average July temperature 68°F., and the annual rainfall from 21 to 35 inches. The plants are the type you would see in parts of southern Canada, at much lower elevations where the temperature and rainfall are similar to that of Mica Mountain. Thus, the effect of elevation here roughly corresponds to the influence of latitude on a continental scale.

During your visit, learn to recognize the major communities by their typical plant members:

Lower desert (below 3,000 feet): creosotebush, saltbush, and needle gramagrass.

Higher desert (3,000 to 3,500 feet): saguaro cactus, pricklypear, cholla, ocotillo, paloverde, and mesquite.

Grassland (3,500 to 5,000 feet): curly mesquitegrass, Emory oak, gramagrass, and centuryplant agave.

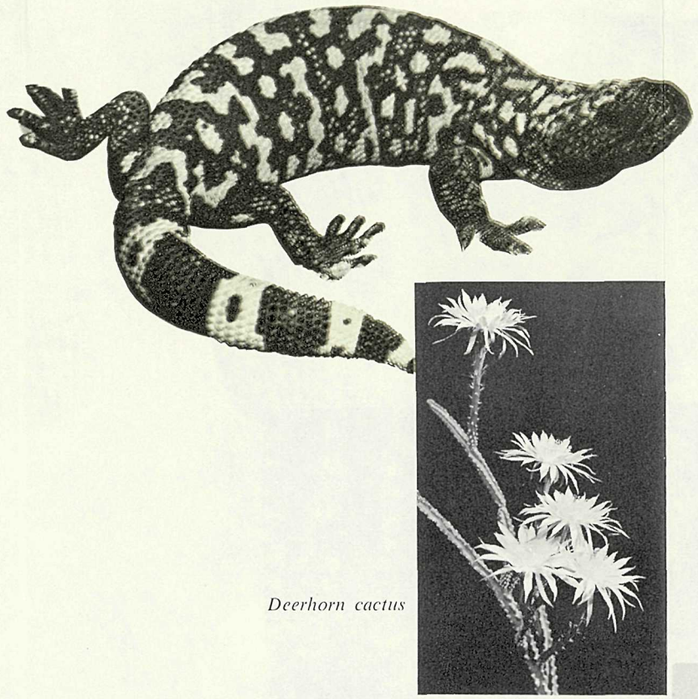
Woodland belt (5,000 to 7,000 feet): juniper, pinyon, scrub oak, mountain-mahogany, sumac, and manzanita.

Forest belt (above 7,000 feet): gambel oak and ponderosa pine, with Douglas-fir, white fir, and aspen at the highest elevations within the monument.

Although some animals move from one plant community to another, many are adapted to life among the plants of certain environments.

The desert mule deer, for example, subsist on annual herbs, shrubby vegetation, and, occasionally, cactus fruits of the Cactus Forest. In summer, they climb the mountains and browse on shrubs among the pinyons, junipers, and oaks. On the other hand, the smaller Arizona white-tailed deer generally stay in the pinyon-juniper woodland in winter. In summer, they browse on aspen, buckbrush, and other shrubs and small trees along the crest of the Rincons.

Collared peccaries, or javelinas, are usually found in the Cactus Forest. They are fond of each other's company and travel in bands of 3 to 50, wandering through groves of mesquite along desert washes as they search for beans and pods of mesquite and the fruits and pads of pricklypear. In summer they, too, will sometimes move up into the woodland belt, where they may remain to harvest acorns fallen from the scrub oaks before returning to the desert for the winter.



Deerhorn cactus

Jackrabbits and hog-nosed skunks, the later distinguished by their solid-white backs, are desert dwellers; but spotted skunks, striped skunks, and cottontails (two species) live throughout the monument.

Insects and other invertebrates play an important part in the desert ecology, aiding in plant pollination and providing food for birds and other animals. You may notice the tarantula hawks—large blue-black, red-winged wasps that prey on spiders. Several species of scorpions live in the desert and up the slopes. Be wary of them, for the stings of some species can be serious.

Badgers and coyotes range throughout the monument, feeding on rodents. In winter, the coyotes generally stay below 6,000 feet, where the rodents remain longer out of hibernation and the hunting is easier.

Among the reptiles, the desert tortoises thrive in the low desert area. There are gopher snakes, red racers, and rattlesnakes at various altitudes at different seasons; and the rare, but poisonous, Sonora coral snakes live in the desert flatlands. However, snakes are not abundant.

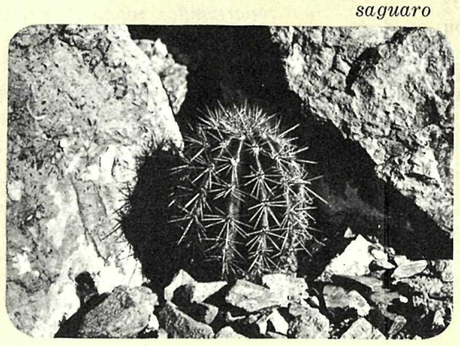
The Gila monster is a famous reptile of the Southwest, the largest (up to 22 inches) and only poisonous lizard in the United States. Gila monsters have acquired a reputation that extends far beyond the narrow boundaries of their range—southern Arizona and extreme southwestern New Mexico. They eat birds' eggs, nestlings, and small rodents. Their thick, heavy bodies suggest sluggishness, but they can twist their heads and bite quickly. You are not likely to see any, for they are uncommon in the monument.

One of the most charming times in the monument is early morning, when the many kinds of birds are active. (A bird guide, obtainable at the visitor center, will be useful in identifying the species that you may see.)

Year-round residents of the Cactus Forest are the curve-billed thrasher, cactus wren, Gambel's quail, roadrunner, Gila woodpecker, gilded flicker, pyrrhuloxia, house finch, and loggerhead shrike. The white-winged dove is here principally in summer.

In the foothills and mountains live the rare harlequin quail, Mexican jay, Bewick's wren, black-tailed gnatcatcher, red-shafted flicker, hairy woodpecker, and Steller's jay. Numerous others—such as the band-tailed pigeon and broadtailed hummingbird—are summer residents.

On the trail to Manning Camp



saguaro

SAGUARO

The saguaro of the Sonoran Desert is a remarkable plant. It survives and grows to tremendous size against what appear to be great odds—heat, scarcity of water, disease, and the many animals that feed upon its fruits and seeds. Yet these, as well as the coolness of a desert evening and the freshness of an occasional rain, are the world of the saguaro.

For a saguaro, life begins when one of the seeds, having escaped the many creatures that feed upon them, sprouts in the shade of another desert plant. Thus for the first years the plant may be hidden beneath the branches of a paloverde or mesquite. At 5 years, the *saguaro* is only a few inches tall; at 30 years, a few feet; at 75, it may reach 15 or 20 feet, and about this time develops its first blunt branch.

The saguaro's stem is composed of a skeleton of 12 to 30 slender vertical ribs that support a mass of spongy tissues. Following a soaking rain (general rains between December and March and local thunderstorms from July through September), the saguaro's shallow, widespread root system draws up immense quantities of water, which are absorbed by the spongelike tissues. A mature plant, weighing from 6 to 10 tons, may take up as much as a ton of water. During extended dry periods, the saguaro gradually uses its stored water, shrinking in girth and decreasing in weight.

In May and early June clusters of creamy-white flowers—the State Flower of Arizona—appear at the ends of the branches. These large, cup-shaped blossoms contain nectar which attracts the *white-winged dove*, and, at night, the *longnose bat*—as well as many insects. Thus, the fertility of the saguaro's seeds is insured: the dove's feathers, the bat's fur and whiskers, and the insects transfer pollen from flower to flower.

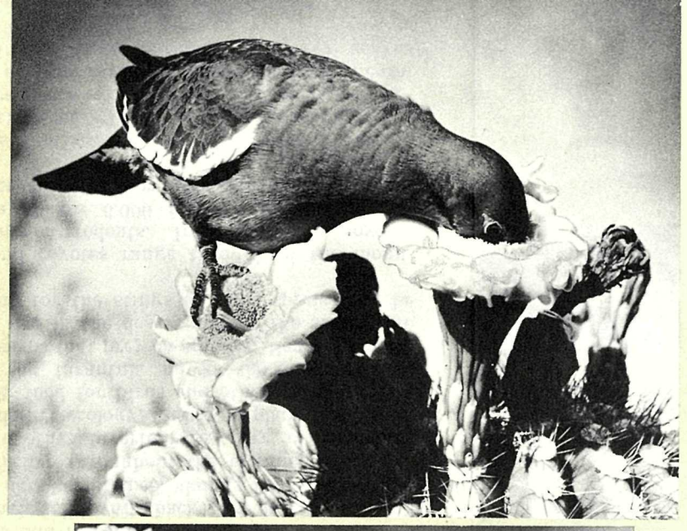
Many birds eat the *fruits* and seeds of the saguaro while they are still on the branches, but most animals must wait until the fruits ripen, burst, and fall. On the ground, they are eaten by *kangaroo rats*, grasshopper mice, deer mice, pocket gophers, rock squirrels, and many other creatures. Occasionally, the fruits are eaten by larger animals—the mule deer, for example, or the *collared peccary*, the little wild pig of the desert.

In the Tucson Mountain section of the monument, *Papago Indians* still harvest the fruits of the saguaro, as they have done for countless generations. Some of the fruit they eat fresh; others they prepare into pressed, dried cakes, and syrup boiled from the juice. Park regulations prohibiting removal of fruit were relaxed so that the Papagos could continue their ancient custom.

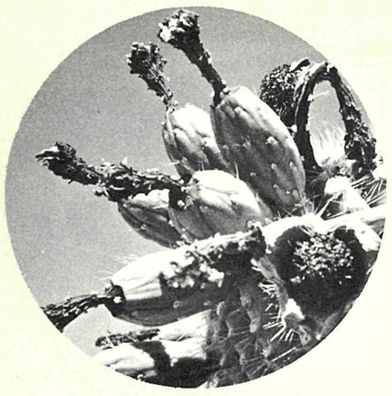
Apartment house of the desert, the saguaro provides a living place for several species of birds. The *Gila woodpecker* and the gilded flicker drill nest holes in the fleshy stems. Sap oozes from the exposed tissue, and a lining soon forms on the wall of the deep pocket, sealing off the precious moisture.

After the Gila woodpeckers and the flickers have raised their young and flown away, other birds move in. Tiny, sparrow-sized *elf owls*, sparrow hawks, purple martins, and flycatchers make their homes in the abandoned pockets. Larger birds, such as red-tailed hawks and great horned owls, build their nests among the branches.

The saguaro somtimes reaches a height of 50 feet, with as many arms, and may live 200 years. Most die earlier of disease or injury. With decay of the pulpy tissues, their gaunt, yet sometimes graceful woody *skeletons* are left weathering in the dry desert air.



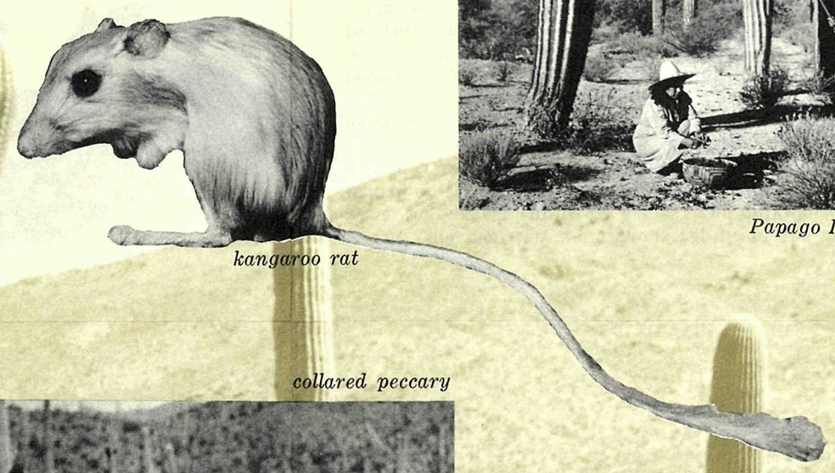
white-winged dove



fruits

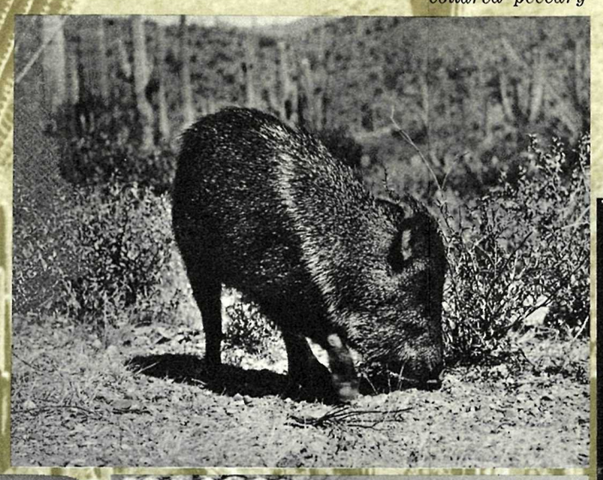
longnose bat

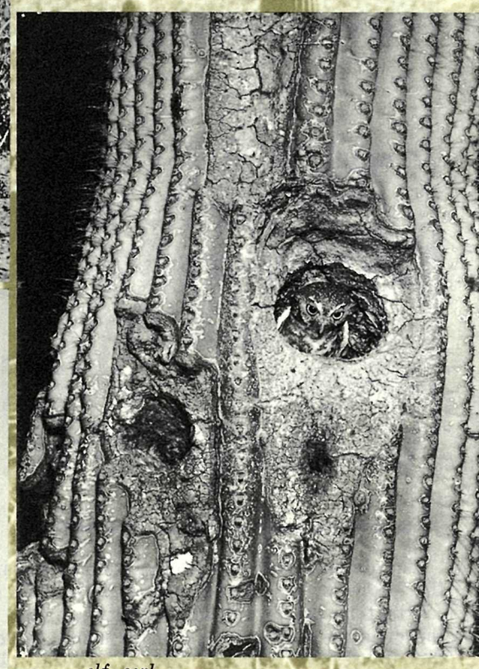
Papago Indians



kangaroo rat

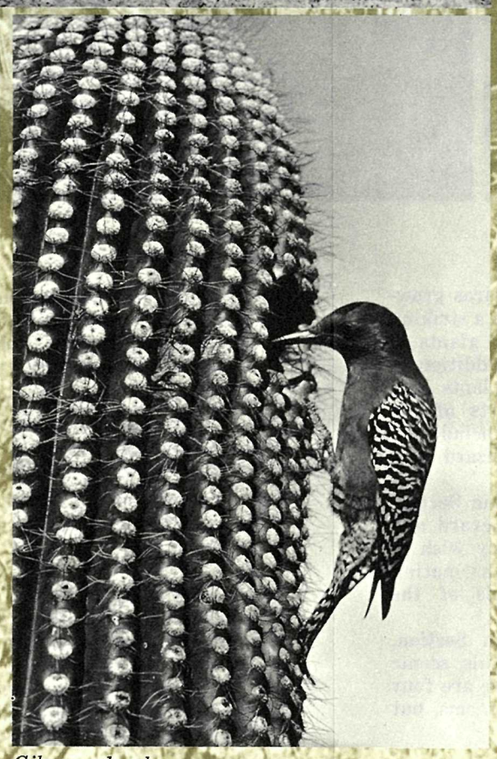
collared peccary





elf owl

skeleton



Gila woodpecker