

The Saguaro

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Nongame Branch Chief

SCIENTIFIC NAME: *Cereus gigantea*. From the Latin words for torch, presumably because the first-named species resembled candelabras, and giant, which aptly describes the saguaro's size.

DESCRIPTION: The hallmark of the Sonoran Desert, commonly reaching heights of 40 feet or more. Probably the best known columnar cactus in the world, it is evident in most any movie filmed in the desert Southwest. Most older saguaros have two to five "arms" (exceptionally 20!) that reach for the sky shortly after emerging from the trunk. The relatively soft, fleshy outer portion of the 1 to 1.5-foot diameter trunk hides an inner woody skeleton that supports this plant, which weighs several tons when fully grown and well watered. Sharp 1 to 2-inch spines are well distributed along trunk and arms. Reproduction is by flowering; the 2.5-inch wide and 6-inch long white flowers bloom in May and (at higher elevations) June. The red-pulp fruits begin opening by mid-June to July.

HABITAT: Well-drained rocky and gravelly slopes, bajadas and canyons below 3,600 feet, but also on valley floors. Soils must be very stable to support a mature saguaro. In the north, saguaros predominate on south-facing slopes. In the south, they occur mainly on north-facing slopes, which tend to be shaded and relatively moist.

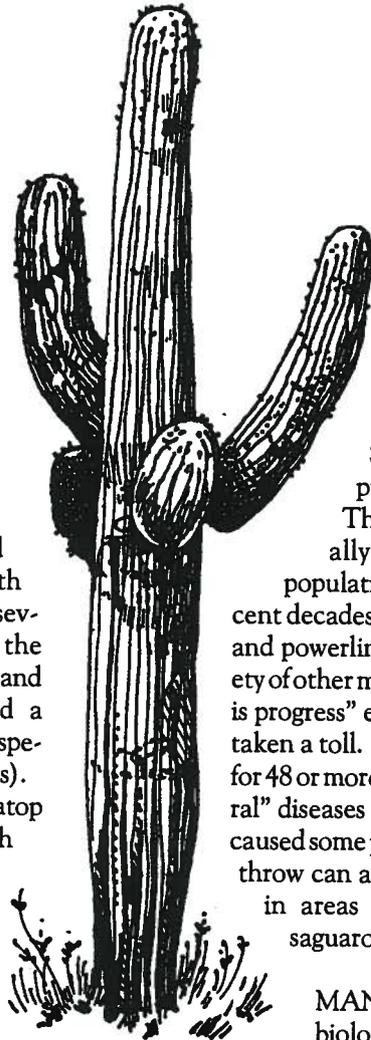
DISTRIBUTION: Sonoran Desert from extreme southeastern California and the southwest half of Arizona south to about Guaymas (Sonora, Mexico).

BIOLOGY: Few plants have as much obvious wildlife value as the saguaro. The nectar and pollen-rich saguaro flow-

ers (the State flower in Arizona) attract countless birds each May-June. Most Arizonans know that white-winged and mourning doves feed at these flowers, but the list does not stop there. House finches, orioles, and thrashers also refuel with saguaro nectar. So do several bats, including the Mexican long-tongue and lesser long-nose, and a plethora of insects (especially some large moths).

The juicy fruits atop these cacti offer as much to wildlife as the flowers do. Birds are ever-present in June-July as the fruits ripen and burst open. Insects abound at these offerings (especially armies of ants, where fallen fruits accumulate), as do a few intrepid rodents that dare to climb so high, and expose themselves to predators while dining. The list of beneficiaries goes on and on. Indeed, watching visitor turnover at a flowering or fruiting saguaro is a fascinating (and easy) wildlife-watching experience.

The saguaro offers other benefits to wildlife besides food. It may cradle the nest of a red-tailed or Harris' hawk, great horned owl, raven, curved-bill thrasher, or cactus wren. Woodpecker-excavated cavities in its trunk or arms may be the nest of an elf owl, western screech owl, woodpecker, brown-crested flycatcher, or even a noxious starling that has evicted



one of the native birds. The saguaro forms a callous-like protective "boot" that insulates these cavities from the living tissue.

STATUS: The saguaro is protected under Arizona law. Though not considered federally endangered, some local populations have declined over recent decades. Urban development, road and powerline construction, and a variety of other manifestations of the "growth is progress" ethic of the mid-1900s have taken a toll. Occasional hard freezes (as for 48 or more consecutive hours), "natural" diseases and other factors have also caused some populations to wane. Windthrow can also be a problem, especially in areas of dirt soils, because the saguaro's root system is so shallow.

MANAGEMENT NEEDS: The biology of the saguaro is pretty well understood, certainly in comparison to that of many other native plants. Several refuges provide protection for some of the best saguaro forests. These include Saguaro National Monuments East and West (both near Tucson), Organ Pipe Cactus National Monument (west of Tucson), and city and county parks in and near Tucson and Phoenix. Local plant protection ordinances or zoning restrictions protect saguaros in other settings. This leaves its management needs as straightforward conservation. If they are not trampled, dug up, or otherwise destroyed, fragile saguaro seedlings have a reasonable chance of living to 150 to 200 years of age, and providing habitat for countless wild animals along the way. 🦔