

3/21/2009 Saguaro: The biggest cactus - ARID DOME

A single-stemmed saguaro cactus (*Carnegiea gigantea*) lives in the Arid Dome. In the wild, it is found only in the Sonoran Desert (in the southwestern U.S. and northern Mexico), but its range is limited even there because it cannot tolerate freezing temperatures in the winter. The genus name *Carnegiea* honors Andrew Carnegie who funded some of the early research. No other plant species is in this genus.

Saguaros grow very slowly. A seedling begins its life under other desert plants where it is somewhat protected. It may grow only 1 to 1.5 inches in the first eight years of its life. It does not begin to branch until it is 50 to 70 years of age, but this varies depending on water supply. Despite this slow start, an average adult saguaro may weigh 6 tons, be 50 feet tall, and probably will live 150-175 years.

The trunk of the saguaro is pleated (ribbed) and spiny. The pleats expand and contract depending on the availability of water. There are also woody ribs inside the cactus, but 90% of a saguaro is water. Like trees in a forest, saguaros are home to many birds. Woodpeckers may excavate nest cavities which may later be used by elf owls, screech owls, purple martins, and other birds. Hawks may nest on the branches and use them to spy potential prey animals.

Once saguaros reach about 35 years of age, they produce large, creamy white flowers which are the state flower of Arizona. Flowering occurs from late April to early June. Like many white flowers, they open at night and close the next afternoon. Nectar-feeding bats, birds and insects are pollinators. In the summer, the red fruit are an important source of food energy and moisture for many birds and animals. The numerous, tiny, black seeds pass through the digestive system of some animals and birds which helps distribute them to new growing sites. Some animals also eat the flesh of the saguaro cactus itself

If you travel to Arizona in the winter to escape the cold or to enjoy baseball spring training, plan to visit the Saguaro National Park near Tucson to see these impressive giants. The greatest threat to the survival of the saguaro is the growing human population in the Southwest. With more people comes expanding areas of home building and an increase in exotic plants that compete with the native saguaro.

