Native Plants of the Northern Chihuahuan Desert

Although the desert may seem an empty wasteland at first glance, a closer look will quickly dispel that illusion, as many things grow in the desert soil. In fact, many of the native plants that thrive in the arid landscape of White Sands have long been used by Native Americans for a variety of purposes.

Soaptree Yucca
Yucca elata

The soaptree yucca uses stem elongation to stay above the advancing dunes. This yucca produces cream-colored blooms in May. The yucca is a virtual "store" in the desert as American Indians used most parts of the plant. The young flower stalks are rich in vitamin C.

The flower pods can be boiled or roasted like a potato. The leaf fibers were used for the fabrication of rope, matting, sandals, baskets, or coarse cloth. The roots were chopped and boiled to produce soap to wash hair, blankets, and rugs.

Hoary Rosemary Mint
Poliomintha incana

The hoary rosemary mint, an aromatic shrub in the mint family, is usually less than three-feet tall. Depending on the time of year, the plant will smell more like rosemary, mint, or a combination of the two.

The plant has silvery hairs that cover its leaves and stems to help prevent the plant from drying out. It produces pale purple to white flowers in clusters from April through June. American Indians used the plant for seasoning foods.

Purple Sand Verbena
Abronia angustifolia

The perennial purple sand verbena is a member of the Four o'clock family and is often the only conspicuous wildflower in the heart of the dunes. This low-growing plant produces pale pink to purple flowers with white centers and blooms from late April into May. Sand grains stick to its oval hairy leaves, giving it a silvery appearance. The purple sand verbena was used by American Indians as a mild sedative, which had a calming effect and was useful in reducing nervousness, anxiety, and tension.

Tree Cholla
Cylindropuntia imbricata

The tree cholla sprouts new plants from a parent, creating colonies of many plants of varying heights. Magenta flowers are followed by yellow fruit, which remain on the plant all winter and are often mistaken for flowers.

Its fruits can be eaten raw or cooked but are fairly dry and tasteless. The flower buds were used by early Americans as a diuretic. A hair tonic was made from the roots that had been soaked in water.

Skunkbush Sumac

Rhus trilobata

The skunkbush sumac, also known as squaw bush or lemonade bush, forms pedestals by binding gypsum sand grains into a compact mass around its roots, branches, and trunk. In the spring before the leaves appear, clusters of yellow and white flowers make the plant stand out. The plant also produces red and orange berries used by American Indians to make a tart lemonade-like drink. The flexible stems of the plant were used for basketry and binding. The branches contain tannin, which is useful in producing dyes. Crushed leaves were used as an astringent to treat stings, bites, rashes, and sunburn.

Rio Grande Cottonwood

Populus-deltoides ssp. wislizeni

The Rio Grande cottonwood often appears stunted because much of its trunk is buried by the sand. A member of the willow family, its presence here indicates a dependable water source. Its wood is soft and valued for its workability and texture. It was used by American Indians for masks and cylinders for drums. Strips of the branches and bark were woven into baskets. The tree's buds and flowers are edible. The bark has purported curative powers and was used for treating bruises, strains, and sprains. A tea made from the bark is an anti-inflammatory agent and mild diuretic.

Mormon Tea/Longleaf Jointfir

Ephedra trifurca

Mormon Tea is a short, spiny, stick-like shrub with thin green stems. The leaves are like tiny scales and grow only at the plant's nodes, giving it the appearance of a tiny bamboo-like plant. Small pale yellow flowers appear in the spring. Both the stems and the roots are high in flavonoids and were used as medicines by American Indians. Early pioneers used the stems to brew a weak tea for medicinal purposes. The plant contains traces of ephedrine, which is a stimulant and decongestant effective in countering symptoms of the common cold. The twigs were also used to dye wool.

Claret Cup Cactus

Echinocereus triglochidiatus

The claret cup cactus, also known as strawberry hedgehog, is primarily found north of the dunes in the Tularosa Basin. The claret cup cactus blooms in late spring with gorgeous crimson chalices that give the plant its name. These bright flowers cover large clumps of the cactus, making it easy to spot. The cactus can reach huge sizes with older individual plants growing up to five feet in diameter with more than 75 stems. The fruits of the claret cup cactus are some of the sweetest of any desert plant. The fruits are covered with spines as they develop but shed the spines as the fruit ripens.

Chihuahuan Desert

The Chihuahuan Desert is the largest of the four deserts in North America. More than 70% of it lies in Mexico. The rest is found in the United States, covering the majority of far west Texas known as the Trans-Pecos. Finger-like projections cross into New Mexico. White Sands National Monument is on the northern edge of this desert within the Tularosa Basin.

At 4, 235 feet, White Sands National Monument lies within a high-elevation desert with long, hot summers and cool winters. Most of the area's precipitation occurs in July and August from intense and fast thunderstorms known as monsoons. The average rainfall at White Sands is approximately nine inches per year.

Winds can be severe with the greatest velocities occurring in March and April. These winds are an important factor in the formation and movement of the gypsum sand dunes at White Sands. As previously mentioned, some plants, like the soaptree yucca, the Rio Grande cottonwood, and the skunkbush sumac have developed strategies to prevail in the unique ocean of sand that lies in the diverse Chihuahuan Desert.