

# Don't snub the ancient and remarkable creosote bush

The following article is first in a series of articles about the trees of the Desert Foothills.

By Bert Edises

Mexicans call it *hediondilla*, literally "little stinker," a reference to the plant's odor after a rain or when its leaves are crushed. Another common Mexican name for creosote bush is *gobernador*, or governor, referring to its dominance over vast areas.

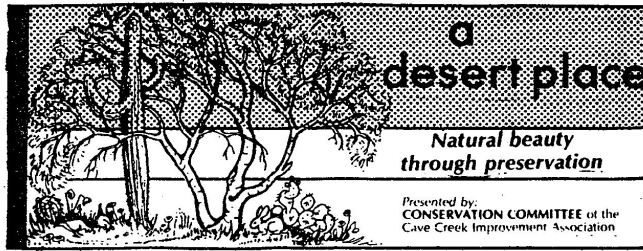
One name it should never be given is greasewood, because that name has long been used to designate another, quite different species, *Sarcobatus vermiculatus*.

If in this article we emphasize the merits of the creosote bush, it is only to offset a kind of botanical snobbery which has tended to ignore or deride *Larrea tridentata*'s true qualities while lauding extravagantly those of its neighbors, the magnificent saguaro, the elegant ocotillo and other Southwestern plants which bring so much color and variety into our lives. Compared to these, creosote bush is dull, it is pedestrian, even its yellow blossoms are unassuming. Yet it has its distinctions.

Mary Austin, sometime doyenne of desert life and lore, once referred to the creosote bush as "this immortal shrub." "Immortal" means exempt from death, and Ms. Austin used that term to describe creosote bush three-quarters of a century before a University of California botany professor named Vasek applied carbon dating to a creosote bush in Lucerne Valley, Calif., and found it to be 11,700 years old. Of course, a 11,700-year-old plant is not yet immortal, but it has gone a long way in that direction.

Vasek's creosote bush is far and away the oldest living plant. It is twice the age of bristlecone pine, which previously claimed the title at 4,900 years and more than three times the age of the giant sequoia, whose 3,800-year life-span won the crown of laurel for many years.

Is it possible to conceive of a living object whose life-span has been continuous for 11,700 years? That means, in the case of our ancient creosote bush, that the seed which produced the specimen found by Vasek sprouted in the year 9715 B.C., some 117 centuries ago. What was going on in the world at that time? And what are some of the things that *Larrea tridentata* might have witnessed during its lifetime?



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Anthropologists tell us that in 9715 B.C., when our bush first saw life, revolution was underway and mankind was achieving for the first time such dramatic technological and social changes as the cultivation of previously wild plants and the domestication of animals as a work force and food source. The manufacture of pottery and cloth had begun. Human population was expanding enormously and extending its control over the earth.

History, understood to begin with the invention of writing, did not exist in 9715 B.C., and would not come into being for several thousand years.

*Larrea tridentata* was still struggling successfully for its existence when the building of the pyramids commenced around 2700 B.C.; when Moses received the Ten Commandments at Mount Sinai circa 1250 B.C.; and when Rome fell to the barbarians in the 5th Century A.D.

Our plant was still thriving and coping successfully when Columbus set foot on the island of San Salvador in 1492, when Cornwallis surrendered to George Washington in 1781.

And so it goes, right down to the present moment. The creosote bush in Lucerne Valley, now grown to a patch 70 by 25 feet in extent, is just as alive today as it was 11,700 years ago.

In addition to being the world's oldest living plant, creosote bush has the distinction of being the most widespread and abundant plant in the North American deserts. It ranges from Southern Utah to deep into Mexico, and from below sea level in Death Valley to around 8,000 feet in Zacatecas, Mexico.

But that's not all. It thrives in the hottest and driest parts of North America, rooting in poor soils where scarcely any other plant can survive. By means of a highly effective drought-toleration mechanism in its leaf system, creosote lives and even flourishes in areas where the daily maximum temperatures are frequently greater than 120 degrees

Fahrenheit, and in areas in which rainless periods of a year or longer are common.

How can you identify this remarkable plant? If you are in the Sonoran, Chihuahuan or Mohave desert and the commonest plant you can see is a medium-sized, rather spindly-looking shrub from 3- to 10-feet high, with tiny, vivid green leaves, it's probably a creosote bush. The plant has no main trunk, but instead has a number of main branches of up to an inch in diameter which arise from a root crown.

The leaves (actually leaflets) tend to be bunched at the tips of the branches. The leaflets are quite tiny, about 6- to 10-mm long, are coated with a resinous substance and are joined together at the base. Unlike many, if not most desert shrubs, the creosote bush has no thorns.

Following rains, the plant produces many small yellow flowers, the petals of which, according to one authority, are "turned diagonally like the blades of an electric fan." The flowers become white, hairy seed capsules, which can often be seen on the bush commingled with the yellow flowers.

In listing *Larrea tridentata*'s exceptional qualities, have I forgotten one of its most important uses as a preservative for lumber and timber? Not at all. The creosote commonly used for the preservation of wood is not derived from the creosote bush, although many think it is. Commercial and industrial creosote is obtained from coal tar. When you crush the leaves of a creosote bush you get an odor which, if you have an active imagination, you can say resembles creosote, but that is the plant's only connection with the commercial product.