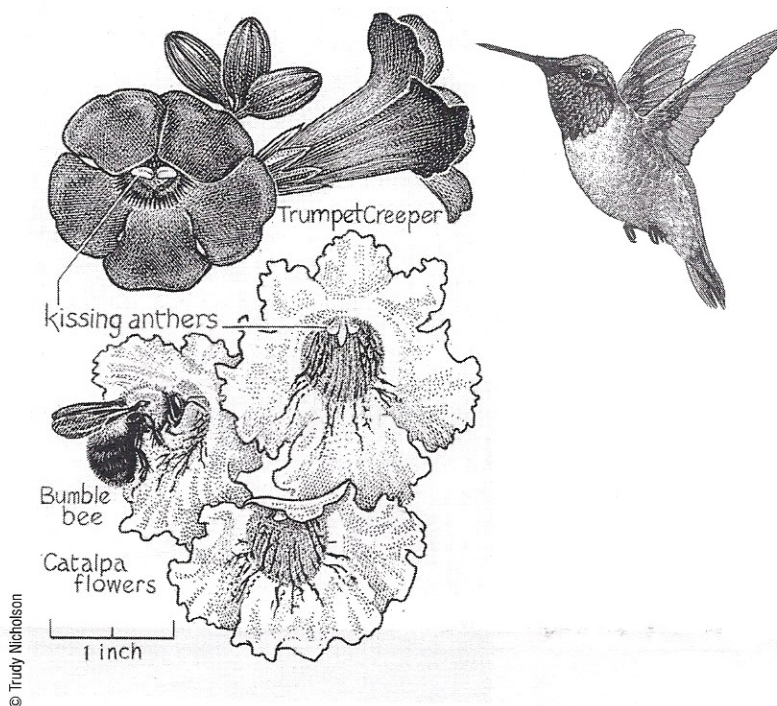




Local Nature

by Eric Dinerstein

Spring Tubas, Summer Trumpets



A Bee, two Bignon flowers and a Ruby-throated Hummingbird

America's naturalist-philosopher Henry David Thoreau made a hobby of keeping a calendar each spring charting the first flowering times of plants around Walden Pond. There were many to note: the diversity of wildflowers native to Concord, Massachusetts, back in the 1840s was high. Recent scientific inventories reveal that many of Walden's wildflower species have vanished, attributed to the overpopulation of ubiquitous white-tailed deer, competition with invasive non-native plants, and climate change.

Concord, Massachusetts was too far north for Thoreau to have experienced the wonder of watching catalpa flowers in bloom and noted it on his botanical calendar. The giant white tuba-like corollas rising on flowering stalks above giant heart-shaped leaves signal, at least to me, the approaching end of spring. Cabin John residents have front row seats for the glorious catalpa flower shows because numerous stately specimens can be seen along Tomlinson Road, a king-sized one appears along MacArthur Boulevard, and

numerous shorter volunteers abound around the neighborhood. Catalpas, like other members of the Bignoniaceae family, produce seeds fixed in a papery material, and when the foot-long, string bean-like fruiting pods open, the winds scatter the seeds far from the parent. The catalpa is fast growing, too. I left two sprouted volunteers to grow in my front and back yards, and in ten years they have become sources of welcome shade.

If the catalpa is the stateliest tree in our woody flora, the flowers of catalpa are among the loveliest. They are pure white on the outside, with yellow and purple streaks and spotting on the inside, the better to guide in the large bees that pollinate them. What makes them easy to identify is a feature common to all "Bignon" flowers—and also those in the African Violet family—"kissing anthers," as a romantically inclined botany professor was delighted to tell us. The anthers are borne on stalks or filaments that are separated from the base until they reach the apex of the flower, where they abruptly fuse. When the catalpas are at their height of flowering in our area, we are at the tail end of spring, regardless of what the calendar says.

Bignons belong to primarily a tropical family of trees and climbing woody vines called lianas. Besides the catalpa, there is another local "Bignon," one familiar to any motorist stuck on Canal Road at rush hour in June. When the weather turns muggy, the flamboyant Trumpet creeper vine announces the start of summer. Look into its long flowering crimson or orange tube to find another set of kissing anthers arranged perfectly to dab pollen on the forehead of a visiting ruby-throated hummingbird come to sip nectar at the base of the flower. Some botanists even refer to the species, known in Latin as *Campsis radicans*, as hummingbird vine. A friend of mine, a biologist and a wit, chose to do a study for a pollination ecology class at the University of Florida on the hummingbird-Trumpet creeper vine interaction. When someone asked him why he chose that flowering plant for his research project, he replied, "Simple, I always wanted to be a Big Man on *Campsis*."

Campsis is best admired from afar and not in your yard. The gardening manuals advise the

foolhardy who grow *Campsis* or allow it to spread to prune ruthlessly. Trumpet vine has the notorious reputation of taking over and even strangling the roots of trees you value as it spreads in an underground network of death and destruction far from its locale. If you want a plant with kissing anthers that climbs, you might try cross vine, *Bignonia capreolens*, a peaceful species that stays in its place and whose flowers are even prettier.

Had our Walden naturalist more wanderlust in him, he would have traveled to the tropics where the Bignoneaceae thrive and met the little known plants that botanists like to refer to as the little-known Bignons. Bignons earned this nickname because as late as the 1960s, they were among the more poorly studied families of flowering plants. Not so now in the age of modern genetics, where about 860 species have been recognized and are widely heralded as some of the most spectacular flowering trees in the tropics. The largest genus, called *Tabebuia*, is familiar to anyone who has driven the Pan Am highway in Central America in spring and seen the bursts of yellow, white, rose, and pink sprays of flowers on the leafless trees covering the hillsides. Or at many tropical resorts, there is a rather well known Bignon, the ubiquitous *Jacaranda*, native to Brazil, and one of the few tree species in the world with purplish-blue flowers.

Africa is not to be left out when it comes to big-time Bignons. Any visitor to the East African game parks, especially Tarangiri National Park in Tanzania, will marvel at the large number of sausage trees (*Kigelia africana*). These giant spreading Bignons produce massive sausage-like fruits that can grow to be two feet in length and weigh as much as 15 pounds. Their pulpy fruits are relished by elephants, baboons, porcupines, and parrots. And in South Asia, wherever the Hindu religion is practiced, the Indian trumpet flower *Oroxylum indicum*, produces a giant seed pod that is considered essential for some religious ceremonies. Like the sausage tree, its large, odiferous flowers are attractive to bats, which in many parts of the tropics serve the same purpose as our valiant pollen-bearing ruby-throated hummingbirds. The aroma is said to be what draws them into the corollas--bats are color-blind but have acute senses of smell. But I like to believe that it is really the kissing anthers. —