

THE BANYAN

IN THE SHADE OF A COLOSSUS



The Banyan is one of our most hospitable trees even though it often begins life as a killer. Though it has the capacity to create a forest all on its own it nevertheless needs a miniscule wasp to ensure propagation. And in a strange reversal of roles, its roots grow in the air, hanging down from branches before they miraculously change, into trunks themselves. This is one of our most revered trees & an integral part of our myths & legends.

For centuries, the Banyan [*Ficus Benghalensis*] has astounded travelers to this country with its singular growth form & its sheer size. Stories of India's majestic Banyans stirred the interest of the Greeks after reports that Alexander the Great & his Army of 7000 took shelter under a single tree. The ancient Greek Historian Arrian in his book on the history of India, quotes Alexander's admiral Nearchus thus: 10,000 men could easily shelter themselves under the shade of one of those trees so great is their magnitude." Several centuries later, the tree's hold on the western imagination had not waned. To the western mind, this "marvel of the vegetable kingdom" seemed to embody the romance, fecundity & exotic appeal of India. Travelers wrote about it, sketched it & even tried [unsuccessfully, of course] to take back portions of it to grow back home. Jan Huygen von Linschoten, a Jesuit traveler to Goa in the early 1500s, enthused about the 'Tree of Roots', saying, "this tree is very wonderful to behold". Others spoke in awed tones about this "wonderful" & "very great and fair tree".

Milton himself immortalized the tree in his poem 'Paradise Lost', when he wrote,

"In Malabar or Decan spreads her arms
Branching so broad & long, that in the ground
The bended Twigs take root, and Daughters grow
About the Mother Tree, a Pillar'd shade
High over-arch'd, and echoing Walks between;
There oft the Indian Herdsman shunning heate
Shelters in coole, and tends his pasturing Herds
At Loopholes cut through thickest shade."

As Milton says, people have always welcomed the “thickest shade” that the Banyan provides. The very name that we know it by come from the Baniyas, members of the Trading classes, who liked to set up shop in the “pillar’d shade” of Banyans, a practice that carries on to this day. In fact, the country’s Oldest Stock Exchange, the Bombay Stock Exchange, established in 1851 AD, also began its business under Banyan Trees opposite the Town hall, where Horniman Circle is now situated. 10 years later, the Stock Brokers moved to another set of Banyan Trees at the junction of Meadows Street & Mahatma Gandhi Road. It wasn’t until 1874 AD that they moved out from under Banyans to their present location on Dalal Street.



Roots reaching down from the branches of a banyan tree

The Banyan belongs to the genus of figs, which includes other species such as the peepal. All species of *Ficus* have a unique pollination system. Have you noticed that fig trees, the banyan included, never seem to have flowers, & yet bear fruit? In reality, the fruit-like structures we call figs bear the flowers inside them. Each such fruit, technically called a syncomium, is actually a container lined on the inside with numerous flowers, both male & female. Responding to chemical cues from the figs, a tiny female wasp enters the syncomium through a small hole at the tip. She comes in laden with pollen from the male flowers of another banyan tree, so that as she lays her eggs inside the ovaries of some female flowers. She also pollinates the other female flowers. Tree seeds & wasp eggs mate with the female wasps grow together until a few weeks later, shortly before the figs ripen, male wasps emerge out of their eggs, mate with the female wasps, & then die, never to leave the fig. so closely intertwined is the interaction between the figs & their fig-wasps that the male fig flowers mature & release pollen just as the inseminated female wasp climbs out of the syncomium, she brushes past the male flowers & carries their pollen with her as she sets out to look for another tree with figs where she will now lay her eggs.

What makes this complex mutualism between fig & gig-wasps even more remarkable is that in most cases, each species of fig tree has its own specific pollinating fig-wasps; banyans will not produce seeds without their wasps & the wasps cannot lay their eggs in any other trees.

The figs of the banyan [as also most other *Ficus* species] may be too full of insects for our tastes, but they are a great attraction for animals & birds, in fact, in parks and in the wild, you can often hear a Banyan before you see it! Bulbuls & Babblers, Mynahs & Hornbills, Parakeets & Pigeons, Monkeys & Squirrels, they all enjoy the Figs on the tree, while Deer, Pigs & even Bears eat what they can on the ground. Figs like the bountiful Banyan are thus critical resources not only for their wasps but also for fruit-eating animals because they play an important role in sustaining

them when other food is scarce' the disappearance of fig trees could mean the difference between life & death for these fruit-eaters.



Figs on a banyan tree



Banyan Leaves are a delicate red when they first emerge

The specific epithet for the Banyan, *Benghalensis*, comes from the famous Great Banyan tree in the Indian Botanical Garden in Kolkata, now all of 225 years old & still going strong. The tree began life on a wild date palm. In the wild, the banyan, like many other figs, is a strangler, which means that, like the Kolkata Banyan, they often take root on top of another tree, usually as a result of a bird-dropping. The seedling puts out of a leaves & roots which gradually grope their way towards the ground. Once they have anchored themselves in the ground, the seedlings grow quickly, putting out many more leaves & thickening their roots which now serve as the trunk. Eventually, as the tree grows, it encircles the host tree with a sheath of roots & trunks, 'strangling' it to death. There is now no trace of the Kolkata Banyan's host date palm.



Banyan tree at Ramohalli, near Bangalore

As the banyan grows, more aerial roots extend down from the branches, growing rapidly once they reach the ground, supporting the branches overhead & eventually themselves becoming trunks. This process of extension can continue potentially endlessly, leading to some really large groves that are still really a single tree. The Great Banyan in Kolkata today covers over 1.5 hectares & has a maze of some 2,800 prop roots! One of the most celebrated banyans in India is the Kabir Bar which grows on an island in the Narmada, 16 Km. from Bharuch. The popular story is that this tree took root from a twig that the Saint Kabir chewed. British Artists & Writer James Forbes, who saw it in the late 1700s, described this “noble tree” as having about 350 large trunks & more than 3000 smaller ones. Unfortunately, periodic floods have washed away parts of this great tree, although it is a sight to behold even in its diminished form. The world’s largest banyan is near Kadiri, in Anantpur District of Andhra Pradesh. It occupies more than 2 hectares & is thought to be about 700 years old.



In Hinduism, the Banyan represents eternal life because of its ever-expanding branches & roots. Regarded as the male to the female peepal tree, it is planted, in some parts of the country, close to a peepal tree in a ceremony similar to a marriage. In fact, the tree has a special place in women’s hearts. In Hindu mythology, Savitri cleverly won back her husband Satyavan’s life after debating with yama, the God of Death, under a banyan. In Savitri’s memory, on the full moon night in the month of Jyeshtha [which falls in May or June], married women fast & circumbulate the Banyan, tie threads around the tree & pray for their husband’s health & longevity.

The tree also symbolizes the Hindu Trinity: the bark represents Vishnu, the roots, Brahma & the branches, Shiva. Often, the tree is surrounded by sacred stones smeared with vermilion & worshipped as representing the Lord Shiva. An interesting variety of the banyan, also venerated, is the Krishna Fig [*Ficus benghalensis* var, *Krishnae*]. This tree has leaves shaped some what like a spoon. The common name for the tree is derived from the legend that Krishna ate his favourite snack of butter using these leaves.

The banyan has many other uses too. Its milky latex is sometimes used as adhesive. It is applied to bruises, cracked soles & any other parts of the body that experience pain. A drink made with diluted latex is given to children suffering from dysentery. Infusions of the bark are considered useful against diabetes & preliminary scientific research with mice has confirmed the hypo – glycemc activity of the banyan. The twigs are used to keep teeth clean while the latex is rubbed on the gums in case of toothache. Of course, the leaves serve as a good source of fodder for

cattle, goats & especially elephants. Not surprisingly, because of its myriad uses, and its generous shade, banyans have been planted near temples, village & along roadsides since time immemorial. King Ashoka's edicts long ago proclaimed: "Along roads, I have had Banyan Trees planted so that they can give shade to animals and men."



Giant Banyan-Tree

Unfortunately, this magnificent tree is slowly but surely disappearing from our countryside. Avenues of banyan trees are not as common as they once were, facing a losing battle against road widening. Trees with their aerial roots looped off are also a common sight today, leaving the trees sadly mutilated, grotesquely handicapped. In urban parks, they have been replaced by more flashy flowering trees or by others that do not have quite so overwhelming a presence. But if we lose the banyans, we also lose a part of our heritage. It is with good reason that the banyan was chosen India's National Tree, for while it's intertwined roots & branches are a metaphor for our unity in diversity, the tree is also present in the warp & weft of our cultural & physical landscape.