



The Myth of the Walking Tree

Q: While on a tour of the rainforest during a recent vacation in Central America, our guide showed us a tree with a very unusual root system. He said that it is called a “walking tree” and can actually move along the ground in search of light. I know plants grow toward sunlight, but can trees “walk?”

—C. Ayles

A: The walking tree, or walking palm (*Socratea exorrhiza*), has very curious roots. While most trees have one trunk, the palm splits into a dozen or more small roots a few feet off the ground. With so many “legs,” the tree looks ready to wander off.

The just-so story of how the walking tree got its name is apparently widely believed. Indeed, no less an authoritative source than Wikipedia states that the walking tree’s “common name arises from the fact that the tree’s stilt roots enable it to slowly shift position, up to one meter a year to get more sunlight.”

One small publishing company was even named after it. According to the Web site of Walking Tree Press, “The Walking Tree of the Amazon jungle has the unusual ability to ‘walk’ on aerial roots, which serve as ‘legs.’ Inspired by a need for more light, the tree lets roots on one side die off and grows new ones in the direction it wants to go. In this manner, the Walking Tree moves up to seven feet a year. At Walking Tree

Press we believe that if a tree can decide to make a change and move in a new direction, we humans should certainly be able to do the same.”

Having spent time in jungles, I have seen such trees before but had never heard the story behind them. The idea has some plausibility on its face—plants do grow toward sunlight—and the rainforest is home to many unusual plants. But a tree that *walks*?

I searched for scientific studies on the walking palm, curious to see just how well documented the “walking” was; perhaps I could even find time-lapse videos of the trees sauntering across the jungle floor. If they encountered a half-buried boulder during their walk, would the walking trees trip? And if they did, would they fall very, very slowly?

These fanciful notions were quickly quashed when I read a study by biologist Gerardo Avalos, director of the Center for Sustainable Development Studies in Atenas, Costa Rica. His article on the function of the walking palm’s root structure was quite detailed but didn’t mention anything about walking. I contacted Avalos, and he gamely replied:

My *Biotropica* paper proves that the belief of the walking palm is just a myth. . . . The development and distribution of stilt roots is a character[istic] that is size-related. Stilt roots maintain the mechanical stability of the palm tree (which can reach well over twenty meters [sixty-five feet] in height). Thinking that a palm tree could actually track canopy light

changes by moving slowly over the forest floor . . . is a myth that tourist guides find amusing to tell visitors to the rainforest. For one thing, a large cone of stilt roots takes a long time to develop. Changes in canopy light conditions are more dynamic, with holes in the canopy being open at the same time that others are closed. There is little possibility for a match in the development of a structural characteristic so complex, relative to the dynamics of light changes in the canopy.

Avalos also referenced a more recent study that came to the same conclusions (Goldsmith 2007). As interesting as it would be to think that when no one is around trees walk the rainforest floor, it is a mere myth. □

Acknowledgments

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References

- Avalos, Gerardo, Diego Salazar, and Ana Araya. 2005. Stilt root structure in the neotropical palms *Irlartea deltoidea* and *Socratea exorrhiza*. *Biotropica* 37(1): 44–53.
- Goldsmith, Gregory, and Rakan Zahawi. 2007. The function of stilt roots in the growth strategy of *Socratea exorrhiza* (Arecaceae) at two neotropical sites. *Revista de Biología Tropical* 55 (3–4): 787–793.

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