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Trees take no prisoners in fight for resources

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One thing you have to admire about trees, is that they are pretty upfront about their intentions. No beating around the bush for a tree.

Once a tree sprouts out of the ground, it means to grow as tall as it can, gather as much of the available resources as it can, and look out for No. 1, with no regard whatsoever for any other plants. Frankly, as far as competing plants goes, and this includes other trees, the plant world is extremely competitive, and is all about who can kill whom first.

When you are looking at an untended tree growing somewhere, what you are seeing is the survivor of an ongoing, never-ending, battle for supremacy. Growing plants look placid enough, but they are always struggling for their very survival, to out-compete their neighbors.

Because of how the competition for, and sequestration of, resources works in the plant world, successful trees of any real size have two big effects on their environment.

First, over time, a sizable tree is going to gather a lot of resources, in one spot. You and I may look at a tree and see a lot of wood and foliage, and be aware that there also exists a large root system to support it, but a lot of other things look at that same picture and see food, and survival, or propagation. The only thing between everything that would like to feed on what trees have gathered, and the trees, are whatever the tree can do to defend itself.

Apparently, in the plant world, it's not enough to be the first to resources such as light and water. Not only do you have to fight for them, but then you have to struggle to hold on to any gains made. That tree that looks so serene as it suppresses it's neighbors is also under constant attack from things that would like to eat it.

The second big thing that trees do is to shape, and somewhat control, the environment around them. One competitive advantage that really helps with this is that trees have genetic capabilities that can allow them much longer potential life spans than most of their competitors. Generally, trees are going to be the longest lived, or at least potentially so, in any set of competing plants.

Frankly, to me, it looks like the ability to just wait for your opponents to die off is a huge advantage in a daily life-or-death struggle.

Anyway, what this means is that over time, trees come to shape the environment around them to their advantage, which helps suppress competing plants, even before they get started.

In a forest setting, that longer-life advantage can actually allow a tree to be suppressed by other, taller, faster-growing plants (even other species of trees), but manage to survive until the taller plant(s) fail, and then take advantage of the newly available light to gain a place of primacy.

Forest evolution can be a surprisingly interesting subject, at least for a tree-type person such as myself.

While a lot of the aspects of all of this competition might not be quite as important in a maintained landscape, there is one facet of it that really makes itself known in the average yard. That one thing is the battle for light, or what tree shade does to other landscape plants.

Property owners are constantly working to keep grass, and other plants, thriving in areas where shade from trees has reduced the growing potential. What they often don't realize is that the trees are doing this on purpose.

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