



There are no individuals. There aren't even separate species. Everything in the forrest is the forest. Competition is not separable from endless flavors of cooperation. Trees fight no more than do the leaves on a single tree. It seems most of nature isn't red in tooth and claw, after all. For one, those species at the base of the living pyramid have neither teeth nor talons. But if trees share their storehouses, then every drop of red must float on a sea of green....

Something marvelous is happening underground, something we're just learning how to see. Mats of mycorrhizal cabling link trees into gigantic, smart communities spread across hundreds of acres. Together, they form vast trading networks of goods, services, and information ...

There are no individuals in a forest, no separable events. The bird and the branch it sits on are a joint thing. A third or more of the food a big tree makes may go to feed other organisms. Even different kinds of trees form partnerships. Cut down a birch, and a nearby Douglas-fir may suffer

In the great forests of the East, oaks and hickories synchronize their nut production to baffle the animals that feed on them. Word goes out, and the trees of a given species whether they stand in sun or shade, wet or dry—bear heavily or not at all, together, as a community ...

Fungi mine stone to supply their trees with minerals. They hunt spring tails, which they feed to to their hosts. Trees, for their part, store extra sugar in their fungi's synapses, to dole out to the sick and shaded and wounded. A forest takes care of itself, even as it builds the local climate it needs to survive....

Before it dies, a Douglas-fir, half a millennium old, will send its storehouse of chemicals back down into its roots and out through its fungal partners, donating its riches to the community pool in a last will and testament. We might well call these ancient benefactors giving trees.

Excerpts from *The Overstory*, Richard Powers