

Hello. My name is Stephen Houser. I am the Senior Director for Academic Technology and Consulting at Bowdoin College.

And I hope you'll join me today in a short passage, and a walk through the woods. This is a passage from the "Hidden Life Of Trees: What They Feel, How They Communicate - Discoveries From A Secret World" by Peter Wohlleben.

When trees grow together, nutrients and water can be optimally divided among them all so that each tree can grow into the best tree it can be. If you help individual trees by getting rid of their supposed competition, the remaining trees are bereft. They send messages out to their neighbors in vain because nothing remains but stumps. Every tree now muddles along on its own, giving rise to great differences in productivity. Some individuals photosynthesize like mad until sugar positively bubbles along their trunk. As a result, they are fit and grow better, but they aren't particularly long lived. This is because a tree can be only as strong as the forest that surrounds it. And there are now a lot of losers in the forest.

Weaker members who would once have been supported by the stronger ones, suddenly fall behind. Whether the reason for their decline is their location and lack of nutrients, a passing malaise, or genetic makeup, they now fall prey to insects and fungi. But isn't that how evolution works? You ask. The survival of the fittest? Their well-being depends on their community. And when the supposedly feeble trees disappear, the others lose as well. When that happens, the forest is no longer a single closed unit, hot sun and swirling winds can now penetrate the forest floor and disrupt the moist cool climate. Even strong trees get sick a lot over the course of their lives.

When this happens, they depend on their weaker neighbors for support. If they are no longer there, then all it takes is what once would have been a harmless insect attack to seal the fate of even giants.

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