

## West Newbury Tree Committee explores tree communication question

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WEST NEWBURY -- As part of its series on "Why Trees Matter" the Tree Committee is exploring the possibility that trees communicate with each other.

"Some people might think that we have spent too much time quarantined when we say that trees talk to each other, but the evidence is there," a recent press release states. "Trees communicate through hormones that act as messengers to direct cells' activities. A hormonal signal is transmitted from the root hairs of one tree into the adjacent fungal tendrils in the soil. In turn, the fungal mycelial tendrils carry the hormone signal to the root hairs of a neighboring tree, which then triggers a cellular response in the recipient tree."

The committee's release noted, "We are all familiar with the floral scents that blossoms release to attract insects and enhance pollination. These chemical signals are thought to be used for other purposes, such as alerting neighboring trees of an insect attack."

Eric Wohlleben, author of the book *The Hidden Life of Trees*, refers to this interdependent community alert system as the "wood-wide web."

"All the trees here, and in every forest that is not too damaged, are connected to each other through underground fungal networks," he writes as part of his study of the umbrella thorn acacia trees in the savannas of sub-Saharan Africa. He found the tree emits a pulse of ethylene gas when a giraffe begins eating its leaves -- which serves as a distress signal for surrounding acacias. Neighboring trees then begin to accumulate increased amounts of bitter tasting tannins in their leaves.

Wohlleben also notes that when a tree's crown branches encounter those of a neighboring tree, the crown branches stop growing. Rather than encroach, Wohlleben suggests that the trees find greater benefit from co-existence, for example by using the neighboring tree's crown for additional support when high wind conditions arise.

While not all scientists subscribe to these findings, the committee concluded, "We're fortunate to live in a region with so many trees and forests. We now have the time to walk through the woods, observe the forest cover, study the undergrowth, and 'listen' to the trees."

The committee is developing a roster of significant and remarkable trees to encourage a better appreciation of the trees in town for their size, historical, cultural or aesthetic value and to better inform land use or property decisions that might impact these trees.

To nominate a tree for the roster visit. <https://www.wnewbury.org/tree-committee>

Source: [https://www.newburyportnews.com/news/local\\_news/west-newbury-tree-committee-explores-tree-communication-question/article\\_448c8bff-7983-5f07-815f-17204b5d70f1.html](https://www.newburyportnews.com/news/local_news/west-newbury-tree-committee-explores-tree-communication-question/article_448c8bff-7983-5f07-815f-17204b5d70f1.html)