

## Tulip poplar summer leaf drop

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Do you have a tulip poplar (*Liriodendron tulipifera*) in your yard and does it look like fall has come early? This is a likely occurrence in the landscape in late summer, especially leading into August. About this time of year leaves on many tulip poplar trees will start to gradually turn yellow before they fall to the ground (Fig. 1). Note, not all the leaves will turn color and fall, but some scattered leaves throughout the canopy will eventually drop (Fig. 2). Leaves may also develop dark spots here and there on the leaves, which can progress into interveinal necrosis if severe enough (Fig. 3).



Figure 1. Tulip poplar showing some leaf drop in the summer.



Figure 2. Intermittent leaves in the canopy turning yellow before falling off the tree.



Figure 3. Tulip poplar leaves with varying degrees of physiological spotting as a result of drought stress. Photo Credit: PPDL

What is causing this to happen? These symptoms have been attributed to root stress, including drought conditions brought on by hot and dry weather in the summer, which is why it is commonly observed in late June through August. Although it can be quite striking to have your tree drop its leaves, this rarely affects the overall health of the tree. Some trees will develop these symptoms each year like clockwork and not show any other symptoms of plant decline. If you notice scattered leaves intermittently turning yellow, the best thing to do is water the tree to mitigate drought stress. However, if you are seeing all of the leaves on an entire limb or even the entire tree turning color or are observing limb dieback, there is likely something else causing stress to the tree, whether it is a root or trunk infection, a borer infestation, or damage to the trunk and/or roots. Any of these other problems would need further investigation.

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