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When do I prune my trees?

This time of year, there is one question that I get asked a lot: is now a good time to prune my trees? In most instances, the answer is no. The best time to prune your trees is going to be late winter to early spring. Think February or March.

When we start to think about tree physiology, it begins to make sense why pruning is best done in cold weather. Just under the bark of a tree are tiny veins, known as the phloem and xylem. The xylem moves water and nutrients from the soil upwards, and the phloem moves food downwards. Surprisingly, these veins take up a relatively small space in a tree, and are found in the outer rings of a tree's trunk and branches.

When you prune a tree or woody shrub, you are creating an open wound. Anything that cuts through the bark will also cut through these veins, leaving them open to harmful bacteria and fungus, putting the tree at risk for infection. If we prune our trees in the cold, dry weather means there is less chance of fungus or bacteria floating around to infect the tree's wound compared to our hot, humid summer.

So why not prune in early winter? This has to do with a tree's reaction to open wounds. When we get an open wound, we keep it clean and our bodies know to regrow the skin in that spot, slowly closing the wound. Unlike us however, trees do not heal but seal. They will form a callous tissue that slowly starts to cover the wound and reduce the risk of infection. While they can seal wounds in the dormant season, they recover from wounds faster in the growing season. By pruning right before the tree enters its growing season, we limit the amount of time the tree has an open, exposed wound. Additionally, when a tree gets pruned in its growing season, it not only tries to seal the wound, but, depending on where the tree is cut, the tree may try to make up for its lost limb by sending out new shoots in that area. If we prune a tree in the fall before it goes dormant for the year, it will try to send out new growth. That new growth will not have time to mature and harden off before winter, and will die back once our frosts hit, stunting the tree's growth.

While it is clear that late winter or early spring is the best time to prune your trees, there are a few caveats. Dead or diseased branches can be removed any time of year. Not only are these branches a hazard to building and people, but a proper and controlled pruning cut will do less damage than a rough wound left behind from a branch snapping in the wind. Additionally, removing branches with a disease or insect infestation can prevent the issue from spreading to the rest of the tree.

The other caveat comes for flowering trees. Flowering trees generally set their buds in late summer or fall for the next spring. If you prune a flowering tree in the spring, you are cutting off its flower buds, and you will not get a fully blossoming tree. And these instances you can wait until the tree is done flowering before pruning.

While it might seem easier to forgo pruning altogether, trees that receive proper pruning, especially when they are young, will be sturdier and less likely to fall or take storm damage. If you are new to pruning, you can find videos and resources available online at kansashealthyyards.org, or check out the recording of our Garden Hour Webinar on K-State Research and Extension's YouTube Channel from March of 2021 where we talked about tree pruning strategies. You can also reach out to your local extension office for more guidance.

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