

By Roger Martin, Head Arborist at Cave Hill Cemetery

"Is it OK to prune my tree this late in the summer?" That is a question I am asked every year. Well, the answer is yes, no, maybe. A multitude of factors play into answering the question accurately: What kind of tree is it? Why do you want to prune it? What do you hope to achieve? Will this action hurt or help the tree?

I'll start with the "yes" portion of the answer. If there is a safety concern, then by all means prune. But be aware that sometimes bad pruning practices done for safety reasons can create future issues that lead to potential dangers. Removing the whole top of a tree or making very large pruning cuts, especially in the summer, can create structural issues. Make sure the cure isn't worse than the problem or consider other methods to mitigate risk. Dead, dying, and diseased limbs can and should be removed. Most tree species indicate specific areas that are the best choice for placement of the cut. The simplest method is to look for the branch bark collar, the raised bark that marks where the branch wood and trunk wood meet. Or if you are making smaller cuts, prune at a bud or connecting branch. This targeted pruning takes a little practice but is most beneficial for the tree's health and growth. Smaller wounds are better than larger wounds.

The "no" part of the answer is a bit dicier. Are we in the middle of a drought? Then it is not a good idea to prune. In drought times, the outer portion of the canopy, the leaves, will shut down. The

stomata, tiny pores where trees breathe or exchange gases, won't function as well as the interior part of the canopy that is shaded by the external leaves. Pruning this protective layer away will just stress the tree more in an already stressed environment. Is your tree an oak? Try never to prune oaks—other than removing dead wood—in the summer. Oak wilt can be spread by beetles attracted to the sap of a fresh wound or through grafted or shared roots. This serious fungal disease is a real threat to our oak population, and we don't want to give it a chance to spread. Red oaks are more vulnerable to oak wilt than white oaks. In addition to not topping a tree, another practice to avoid is excessive thinning of the canopy. The perception is that thinning will allow wind to blow through thus reducing the risk of wind damage. This is simply not true. Biomechanics have proven that interior limbs help to dissipate wind forces. The moving limbs help to reduce and absorb energy throughout the canopy and mitigate the potential for breakage.

Here is the "maybe" bit. The season when a tree is dormant has long been thought of as the ideal time to prune, especially if the pruning involves making larger wounds by removing larger branches. This allows the tree to take advantage of the entire growing season to compartmentalize the wound. Trees conceal wounds; they don't heal them. A proper pruning cut will leave a visible doughnut-like wood roll, showing the branch bark collar was targeted correctly. This isn't immediately visible, but after some time it will be obvious, based on the tree's wound response. Another point of view suggests pruning while the tree is in the midst of growing, giving the tree a head start on sealing its wounds prior to the dormant season. Weather conditions and the overall health of the tree can help you decide which is the best choice of action.

Many kinds of pruning techniques can lead to more harm than good. "Lion's tailing" is one example, often practiced, but absolutely wrong to do. The goal of lion's tailing is to lift the limb without removing it entirely. Removing everything from the point of attachment at the trunk while leaving a tuft of small branches at the end makes the limb resemble a lion's tail. This can lift the limb but will lead to breakage. It also will hinder survival of the limb should something happen to the end. Limbs can be lifted by judicious and targeted pruning, with selective cuts to reduce weight at the end. This technique leaves the limb still able to reduce wind force and still equipped with survival tactics it may need in the future.

We can't always wait for the perfect time or conditions to prune our trees. What we can do is use good judgement and common sense to accomplish our tree-pruning goals. At Cave Hill we follow these guidelines: Only prune if there is a reason to prune. Always approach each task with a purpose. Small wounds are better than big wounds. Before beginning to prune, we ask ourselves: What is the best way to accomplish our goal while removing the least amount of canopy? Never prune more than one quarter of live canopy at any given time, if possible. Trees are remarkably good at surviving and adapting in their environment. If all of us seek to do the least amount of harm to our trees while sharing the same space, then we will have a much healthier canopy and continue to receive all the benefits that trees provide. Any risks associated with tree care will always be outweighed by the benefits of having them around us.