

As we now enter late autumn, daylight hours grow shorter, less sunlight intensity exists and colder temperatures prevail. Trees and shrubs are preparing for dormancy. By now, most deciduous trees have lost their leaves. Note, I said most, but more about that later. Once fully dormant, a deciduous tree's roots, branches, and twigs can endure the freezing temperatures of winter, but its leaves cannot; thus, autumn leaves must fall.

Natural leaf drop is a remarkable phenomenon. The tender thin leaves of ash, maple, elm, and other broadleaf-deciduous trees consist of cells filled with a water-like sap that freezes in winter, killing all living tissue. Any plant tissue unable to live through the winter must be sealed off in order to secure the tree's survival. In preparation for leaf drop, a group of cells called the abscission layer forms at the base of the leaf stem. This layer cuts across the tiny nutrient-carrying tubes that connect the leaf with other living parts of the tree. These tubes normally carry water and minerals from the roots to the leaves and return sugar synthesized in the leaves to the rest of the tree. As the abscission layer forms, it deprives the leaf of water, and the leaf begins to die. Before the leaf dies and drops from the tree, sugar, pigments and other waste products accumulate in the leaf creating the colors of autumn. Once the abscission layer completely forms, the leaf dies; and it falls from the tree.

Not all trees create abscission layers at the same time; thus, we have some trees dropping leaves earlier than others. Ash trees are one of the first trees to drop their leaves. Upon the arrival of a killing frost, ash trees quickly drop their leaves and interestingly, almost all at once. Other trees such as maple and elm begin to lose their leaves after the first frost and continue to do so for a number of weeks. These particular trees are now nearly void of leaves. Oak trees are an exception. The separation layer of their leaves rarely detaches completely on its own. Dead oak leaves often remain attached throughout winter until the newly emerging leaves in the spring force the dead leaves off.

Earlier I referred to the fact that MOST deciduous trees have lost their leaves. For the past month and a half, Rita and I have been utilizing most of our spare time raking leaves. Our neighbors have been doing the same.

The majority of leaves we have been raking are not from our trees. Our surrounding neighbor's trees are either ash, maple or elm. Up until now, what leaves we all have been raking is a collection of those three species. It is now time for the sycamores!



Perhaps you might recall that over the years I have complained about two very large trees growing in our front yard. I have often mentioned that I have a

love/hate relationship with these two trees. Soon we, as well as all our neighbors, will loathe these trees. Sycamore trees are notoriously late dropping their leaves and extremely slow dropping them. With most trees in the neighborhood now void of leaves, I shudder to say the onslaught of falling sycamore leaves now begins, and it will not end until late winter. Rita and I accept this ugly phenomenon, but empathize with our neighbors. They, like us, will now continue spending leisure time raking sycamore leaves and, sadly, doing so well into the winter months. All I can say to them is, "Sorry."

In closing, autumn leaves must fall and in the Griess's yard, they will continue to fall, and fall, and fall — those darn sycamores!