

Spring is the time of tulips, daffodils and magnolias. Unfortunately, it is also the time of over-mulching, over-fertilizing, and over-zealous pruning. You cannot make a trip to the garden center without seeing people pushing carts overflowing with mulch, fertilizers and brand new pruning shears back to their cars. These are three of the gardening world's biggest mistakes, and the source of the greatest pet peeves of knowledgeable plantmen. Now, that is not to say that mulching, fertilizing and pruning should be forgotten or ignored, rather that all things must be done within reason.

For instance, mulch is a wonderful thing; particularly organic mulch. It protects roots against foot damage, eliminates competition from other plants, prevents run-off, retains moisture and adds organic matter to the soil, thereby improving soil structure. Unfortunately, mulching is one of the most "overdone" gardening tasks.

Every spring you will see mounds of mulch piled around the trunks of trees. These are affectionately referred to as "mulch volcanoes" by gardeners in the know. When mulch is piled against the trunk of a tree it locks moisture against the bark, causing rot and promoting insect damage. The results are weakened trees with less vigor. Some may even succumb to wind storms by breaking off right at the mulch level. This was seen all over the Charlottesville area following Hurricane Isabel.

Occasionally you might notice that "landscapers" will pull the mulch away from the trunk creating a moat within the top of the "volcano." These mulch rings would aptly be referred to as "mulch tires." The reasoning here is probably to protect the trunk of the tree, but these "mulch tires" cause equally as much trouble. Water collects in the moats just as it would within an old tire. This water then stands against the trunk of the tree causing the same moisture damage that results from the "volcano."

A third common mulching faux pas is when mulch is piled six or more inches high within a planting bed. This usually happens when people want to "freshen" the look of their mulch, so they pile new mulch on top of last year's mulch. When this is done, a barrier is often formed, not allowing moisture to migrate through to the roots. Because water is not making it to the plant roots, the roots try to grow to the water. They grow out of the soil and into the mulch. Here they are more susceptible to drying out during dry periods, as mulch dries far more rapidly than clay soils. If your intention is to "freshen" the look of your mulch, pull away some of last year's mulch before you apply any new mulch. With the mulch that remains, cautiously mix it into the soil with a pitchfork. Do not use too much force or you may cause root damage. Once you have removed some old and loosened that which remains, add new mulch, being sure the depth of previous years' plus new mulch never exceeds two to four inches.

Improper fertilization is another great frustration of knowledgeable plantsmen. Many novice gardeners believe that spring is the best time to fertilize trees, shrubs and lawns because that is when garden centers carry fertilizer products on their shelves. Unfortunately, this is not the case.

Ideally, cool season grasses such as the many fescue varieties should be fertilized in the fall. This is when they will spend their energies growing root, rather than leaves, thus making them less susceptible to drying out as well as healthier and more likely to withstand pest pressures. The general rule of thumb for lawn fertilization is the "SOD" principle. Fertilize September, October and December. Lawns can be fertilized at a half-rate in May if a quick green-up is needed.

For trees and shrubs, the best time to fertilize is late fall or winter after the plants have gone dormant. Trees and shrubs may be fertilized lightly in the spring, but this is best done after threat of frost has passed, thus avoiding any chance of new, tender growth being burnt by the cold.

Applying fertilizer in the spring and summer can actually be quite detrimental to the health of plants. Fertilizers applied during the active growing season result in nutrients being directed to leaf growth, at the expense of root growth. This makes plants less likely to survive dry periods, as are common during the summer months. Additionally, tender new growth is more susceptible to insects and diseases which are far more prevalent in the environment during the spring and summer months than during fall and winter.

In addition to adding stress to plants, spring and summer fertilization increases maintenance. Lawns have to be mowed more frequently, trees and shrubs require more pruning to keep them within bounds, and with the potential of increased stress from pests, pest management practices will likely be necessary.

While applying fertilizer at the wrong time of year is one of the most common fertilizing mistakes, another is applying fertilizer without knowing if it is truly necessary. Without a soil test there is no definitive way to know how much fertilizer is required. Even the most inexpensive soil test will indicate nutrient levels and pH. These are important to know because there is no sense in applying fertilizer if nutrient levels are already plenty high, nor should it be applied if the pH is not within a desirable range. Soil pH is directly related to nutrient take-up. This means that if the pH is not correct, no matter how much fertilizer you apply it cannot be taken up by the plant. A good rule of thumb is to test soils every three years, then adjust the pH as necessary, then fertilize at the appropriate time of year using only the amount called for in the soil test. Check with your local garden center, landscaper or Virginia Cooperative Extension to have a soil test run.

If you cannot find time to run a soil test this year, then give your plants a little boost by top-dressing over their root systems with ¼-1/2" of compost. Compost not only provides nutrients, but it also improves soil quality.

Pruning is another gardening task you see taken on this time of year. While an important component to plant maintenance, pruning is often overdone. With leaves still off the trees, spring is perhaps the best time to witness first hand the "torture prunings" that are committed on trees all over the Charlottesville area. The two most frequent tree victims of over pruning are the crape myrtle and Bradford Pear. Shrubs that are often pruned beyond recognition are azaleas and forsythia.

Crape myrtles are so frequently over-pruned that the pruning technique that is most often perpetrated on them is now commonly referred to as "crape murder." "Crape murder" is when all of the small branches are stripped from the tree, and the large, main branches are sawed back to three to five feet high. It is a great misconception that this results in better blooms on a crape myrtle. In fact this has no effect at all on bloom, yet does pose a threat to the health of the plant.

Proper pruning of crape myrtles involves lightly trimming back the last 12 to 18" of smaller branches that may have been frost damaged. Additionally, any crossing and rubbing branches should be removed.

Bradford Pear is another victim of poor pruning. There is no denying that Bradford Pears are maintenance nightmares, sometimes even nicknamed "BAD-fords". They grow so quickly that they are weak limbed and thus break easily under wind and ice pressures. Also, they tend to have shallow roots that make mowing around them difficult. Despite all of their shortcomings (which in my book also include too strong of an odor during spring, and allergy inducing blooms), they do not deserve the torturous treatment they so often have to endure.

These trees are often "topped," leaving just a few feet of branches above the trunk. The misguided reasoning for this is that it will make them less susceptible to wind damage. Unfortunately, the opposite is likely true. Trees that are topped are much more susceptible to insect and disease damage, and pest damaged trees are more likely to lose limbs during windstorms. The reality is that Bradfords have poor branch angles and windstorm damage may be inevitable, although pruning done early in their lives to increase branch angles may help minimize the risk.

Plant "meatballs" or "gumballs" are also common sites during the spring months. These occur when electric pruning shears are placed in the hands of over-zealous gardeners. Azaleas nor forsythia are supposed to be grown in tightly manicured balls. They have a beautiful, natural shape that should be embraced. Too often you will see where year after year, these plants have been forced to

conform to the shape of a gumball. In doing this all the plant growth is focused on the outermost tips of the branches, and all of the inner limbs end up dying out, with blooms becoming sporadic at best. This happens most often when the wrong plant has been chosen for the wrong place. Either a large weeping forsythia just does not fit in your yard, or perhaps you like tightly clipped boxwood hedges, but the homeowner before you planted azaleas. In either case it is never acceptable to over-prune these shrubs, rather they should be moved to a more suitable location.

As a general rule, the electric hedge trimmers should be shelved or sold at the next neighborhood yard sale. Even on plants such as boxwood that look nice when pruned tightly, hedge trimmers are not the appropriate tool. They slice through the foliage, leaving half leaves with tattered edges in their wake, while encouraging all that outer growth and inner limb death.

Although these gardening pet peeves may seem trivial to some, they do actually effect our environment a great deal. Healthy, properly maintained plant material protects our water quality by holding soils in place and not allowing nutrients to run-off into our waterways. They also require less supplemental watering, thereby reducing the demands placed on our local water supply. Do your part this spring by adding a little less mulch, storing that fertilizer away until fall and putting down your hedge trimmers.