

Trees and Threes

Paul Hetzler

Late winter is the optimal time to prune trees. During the weeks leading up to bud break, trees' chemical defense systems are waking up, even though the trees themselves are still dormant in terms of new growth. Pruning is both a skill and an art, and must be learned in that order. Proper equipment and a few guidelines are needed to master the skill; the art will come with experience.

If you had to shovel the driveway with a spatula, you'd soon despair. By the same token, pruning with cheap tools is agony. A high-quality hand saw and bypass-type hand pruners are essential, and a good lopper is a welcome bonus. Good tools will last a lifetime, and you'll be amazed at the difference they make. Few retail stores carry professional-grade pruning tools, so you may have to search for arborist-supply sites online.

Trees and threes often go together. You might say pruning starts in "3-D," because removing dead, damaged and diseased branches is the first order of business. When it comes to live healthy wood, no more than one-third of the branches should be removed during any pruning cycle, which (surprise) is typically three years for shade trees. Young trees can tolerate heavier pruning, while older ones need a light touch.

Once the 3-Ds are out of the way it's easier to see what else needs attention. If you find crossing and rubbing branches, take the less desirable of the two. Whenever possible, favor wide branch-to-trunk attachments over narrow ones, which are more prone to breakage. In most cases, branches are pruned back to the trunk, although sometimes pruning back to a side branch is preferred for aesthetic reasons. When doing so, make sure that side branch is at least one-third the diameter of the branch you remove.

Another rule is that two-thirds of a tree's leaf area should be in the lower half of the crown. Lower branches are essential. It seems hard to believe, but on hot summer days the leaves in the upper the upper canopy actually get so hot they can no longer photosynthesize. But the shaded lower branches are able to still carry on essential tree business until things cool down for the leaves up top.

Obviously, maple sap will run from pruning wounds in late winter and early spring. While research indicates that the loss of sugars is not significant, you may want to prune maple, as well as butternut, birch and hickory, which "bleed" when cut in spring, in mid- to late July. This is actually the second-best time to prune trees, and compared with dormant pruning, fewer water sprouts or suckers are produced near the pruning wounds.

Put away the saw, though, during spring leaf-out and again during fall color. Pruning in these times can lead to serious long-term health problems. For trees, mostly.

Prune the branch, not the trunk. This sounds ridiculous on its face, but it's important. At the base of most branches is a swollen area called a branch collar, which produces fungicidal and bactericidal chemicals. The branch collar is part of the trunk and should never be cut. In other words, flush cuts are bad.

In the past, pruning cuts were painted over with various compounds, but research has shown that coated wounds never fare better than uncoated ones. In fact, many times they actually decay faster and more extensively than untreated wounds.

To the best of my knowledge, though, people-cuts can still be treated with Band-Aids. Keep some of those on hand—good pruning tools are really sharp.

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