

A Shrub Pruning Primer

In a previous article I discussed why Box and Ball pruning is not good practice. In this article I want to discuss the right way to prune and how you should do the pruning yourself or how you should require your landscaper to do it as you oversee the work. First, it's important to understand that plants never ask to be pruned and they don't need to be pruned regularly. In nature when a branch is no longer useful or providing food (leaves through photosynthesis) for the plant, it drops the branch. Every pruning cut reduces the number of leaves in the food factory and stresses the plant.

The most commonly cited reason for pruning is to **reduce the size of the plant** – it's grown too big, I want to make it fit the space, or I want it shorter. Other cited reasons include plant health (NO – unless the branch is dead or infected); to keep it from growing into the plant next to it; to keep it from growing over the sidewalk/street/driveway. Note that plants have a genetic memory of how big they should grow. You can prune them all you want, but they will continue to try to grow to that genetic size.

What is the primary cause of overgrown shrubs? A landscape that looks good on day one after installation. That's because it has too many plants in the design which is why it looks good to the owner. There's no room for growth. It's like buying a pair of shoes in size 8 when you're in junior high and assuming size 8 will always fit you. A landscape should look sparsely planted when first completed because like people, plants grow bigger and you need to leave some space for them to do that. Plants should be planted no closer to a sidewalk/street/driveway than half the mature diameter. This measurement applies for all the plants in the design – no closer than half the diameter to the next closest plant(s) or boundary. To fill in sparse areas initially you can use annuals, pots, attractive boulders, ground covers that can be removed later, or just wait three years.

If a landscape begins to look overgrown, start removing plants. Take out the volunteers that will cause future problems and one (or more) of the plants if they will overlap as they grow. Think of a lavender "hedge" with plants that grow into each other.

The Cuts

There are two types of pruning cuts: heading and thinning.



Heading and thinning cuts

Heading and thinning cuts have different effects on subsequent growth.

Image from the Virginia Cooperative Extension

A **heading cut** basically cuts off the end of a branch, twig, or stem in the middle and it leaves a stub. Heading creates bushiness and encourages growth after the cut is made from all the buds near the cut. Shearing and topping use heading cuts. A few plants like winterfat and potentilla like to be sheared because they are browsed in nature.

A **thinning cut** which is the preferred cut removes a branch back to another branch, trunk, stem – one side of a V or to the ground. It forces new growth in the uncut branch side of the V and spreads new growth more evenly throughout the shrub. Thinning cuts let light into the interior. Nandina and forsythia are examples of cane growers and to prune them you cut the oldest tallest cane(s) at the ground.

Selective Cuts

To make a selective cut which is a form of thinning cut, look at the shrub, grab the tallest branch and follow the branch inside the shrub looking for the first V or crotch. Cut the longer part at the V. If this doesn't make the shrub small enough, continue down the branch to the next V and cut there. After the cut, growth is routed to the remaining branch, so the shrub is forced to extend that branch, not grow new branches from or near the tip. This helps maintain the natural look of the shrub.

Below are some ways to make plants smaller but if the genetic size of plant is larger than the space available, the plant will need to be constantly pruned. One rule of thumb is that if a shrub needs to be pruned more than once yearly, replace the shrub with one that fits.

Growth Habit of Shrubs

Shrubs generally come in three growth habits: mounds, cane-growers, and tree-like. Regardless of growth habit, when pruning **always start by removing dead and infected wood**. After that choices include suckers, branches that go opposite the natural plant growth (into the center or across the main stem), rubbing branches, and one of a parallel set of branches when a branch encroaches on another branch's space.

Mounds look like blobs and are moderately tough plants – often used in mass plantings. They have small leaves or flexible less-woody branches. You usually just want them to look neater or to reduce their size. Mounds are the easiest growth habit to keep smaller. To prune, locate the longest most unruly branch. Grab the tip with your left hand. With your right-hand pruners follow the branch down into the interior of the shrub, locate a V from 2"-12" below the general surface level of your shrub (depth depends on how short you want to make it) and cut off the unruly branch. Now look for the next most unruly branch and cut it back. Continue doing this over your shrub until it looks neater and shorter, but still natural. Mounding shrubs often benefit from taking out some of the old stems/canes to their base. This opens the shrub up to more sun and renews it by allowing new growth in the interior – not the dead brown look.

Cane growers are plants that renew themselves by sending up new branches (canes) from the base. To prune cane-growers count the stems at the base of the shrub. Take out 1/3 of the biggest and oldest cutting them off at the base or if necessary, cut those that are hazards. If you cut 1/3 each year, after three years you will have completed pruning the whole plant. Tidy up the top with thinning cuts and cut back anything touching the ground by cutting to a larger stem or the base. These are tough plants and will regrow quickly.

Tree-like shrubs are ones that branch like trees (a trunk, branches, and twigs). Tree-likes have stiff woody branches that divide many times. These are difficult to prune if they've grown big and are more likely to respond poorly to pruning. Good selective pruning can open them up and make them look less dense, can be used to train branches away from structures, and can bring more beauty out of the shrub. Of course, these shrubs are the hardest to do.



Image from someone's blog

Never remove a high percentage of branches/foliage in any one year – this is a multiple year project. Pruning stresses the shrub and may cause water sprouts (new growth along a branch that is vertical on a branch) or sprouting from the cut.

Taking the dead wood out is a good way to start on any plant as these branches aren't being used for food. Next take out true suckers (straight-up, skinny branches from the base or trunk of the shrub). If a branch is less than 1/2" diameter, cut back or remove any touching the ground. This is a good place to stop for year 1.

In year 2 start with dead or infected branches first then shorten or completely remove the worst wrong-way branches that start from the outside of the shrub and go the wrong way back into the center and out the other side. Sometimes a side branch has a smaller branch that heads too far up into the next "layer" or goes too far down into another branch's space. You can cut some of these off to add more definition to the shrub. If you have two parallel branches growing into each other's space, it may look better to remove one. If you have three parallel branches you may want to remove the center one.

When to Prune

Most plants don't really want to be pruned in the spring – late summer would be better. That's because in the spring the plant has spent energy to produce the buds you're cutting off. And the plant needs to use even more energy to try to replace the food factory it just lost, energy that's redirected from protecting against pests and diseases or used in other plant functions. In the spring the plant wants to grow the missing part/food back. In late summer the plant is slowing down and ready to drop leaves. It doesn't need to grow the branch part back.

The primary reason we traditionally prune in late winter/early spring is because in deciduous trees and shrubs we can see the form. It's hard to see the structure of a plant loaded with leaves. And if you prune in late fall/winter any regrowth can be frozen. The plants you want to avoid pruning in late winter/early spring are the ones that bloom in the spring like lilacs, forsythia, western sand cherry, chokecherry, and golden currant. If you prune them before they bloom, you cut off most of the bloom.

For more information read the following publication from the Virginia Cooperative Extension especially about rejuvenating older shrubs go to this site <https://www.pubs.ext.vt.edu/430/430-459/430-459.html>