



Newsletter

Landscaping and Trails Committee

High Desert Gardening

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Pruning

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Pruning is one of the least understood and most daunting landscape maintenance practices for most homeowners, especially when we might be dealing with unfamiliar plant species in our new Mirehaven landscapes. Although many people aren't sure what to do or when to do it, proper pruning is essential for maintaining attractive and healthy trees and shrubs. Pruning can be simplified by understanding some of the basic principles and techniques. This brief introduction focuses on pruning shrubs, but many of the same principles can be applied to pruning small trees and for more specialized procedures (e.g, pruning roses, hedges, topiary). This discussion provides a general overview of pruning--more detailed information and diagrams can be found in the references at the end of the article.

WHY DO WE PRUNE?

There are several key reasons to prune: maintain plant health and aesthetics, control growth, encourage flowers and fruit, create special forms, and rejuvenate old or overgrown plants.

WHEN DO WE PRUNE?

The timing of pruning is very important and depends upon the type of plant and the desired outcome. The following factors need to be considered when trying to decide when to prune:

1. Dead, damaged, or dying wood can and should be pruned at any time.
2. Spring-flowering shrubs should be pruned right after they bloom, since they flower on wood that was produced during the previous growing season.
3. Summer-flowering shrubs should be pruned in late winter or spring before new growth starts since their flowers are borne on wood produced that same year.
4. Shrubs without flowers or fruit should be pruned when they are dormant, typically in late winter or spring and before growth has begun.

HOW DO WE PRUNE?

Basic Equipment:

As with any job, you need the right tools. There are many types of specialized equipment available for pruning, but a few key tools provide what is necessary for successful pruning.

1. Pruning Shears: used for small-diameter branches and twigs up to about 1-1½ inches in diameter.
2. Lopping Shears: used for branches greater than 1¾ inches in diameter.

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3. Pruning Saws: used for large branches usually greater than 2-3 inches in diameter.

Regardless of the tool, it is important to keep it *sharp* and *clean*. This can be done with regular sharpening and cleaning with 70% alcohol, disinfecting wipes, aerosol disinfectant sprays (Lysol®) or one of the commercially available compounds such as Greenshield®. After cleaning, tools should be rinsed and oiled. A sharp blade will give a clean cut with minimal damage to the tissues. Cleaning will minimize the spread of any microorganisms that cause plant diseases that may be spread on contaminated tools.

How much do I prune?

Most shrubs benefit from *light* to *moderate* pruning every year or every few years, once they've become established after transplanting. No more than 1/3rd (~30%) of the branches should be cut in a single season. Most needled evergreens (e.g., juniper, pine) require infrequent, minimal pruning.

Proper Pruning Cuts--Small Branches and Twigs:

There are three things to consider when making cuts on small branches and twigs.

1. Angle of cut: This optimizes the surface area of the cut for "healing" and cuts should be made at a 45° angle (Figure 1).
2. Distance to the next bud: The optimum distance to the next bud is about ½ inch. When cuts are made closer or farther away, the bud is damaged or too long a stub remains and "healing" will be inhibited, respectively (Figure 1).
3. Inward- vs. Outward-facing buds: This is used to manipulate the direction of the new growth and the shape of the plant (Figure 2). By pruning back to an inward-facing bud, the new growth will be toward the center of the plant, which will make it denser. Pruning back to an outward-facing bud will produce new growth away from the center of the plant and make it more open.

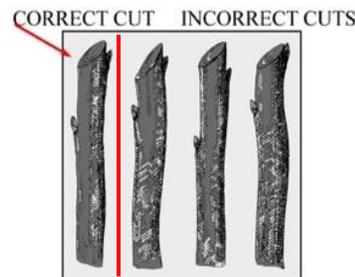


Figure 1. Angle of cut and distance to the next bud.

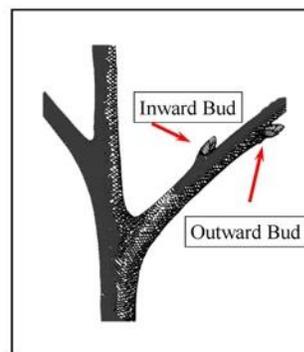


Figure 2. Inward vs. outward facing buds.

Basic pruning practices:

Two basic practices are thinning and heading cuts. The goal of pruning is to increase the health and aesthetics, without giving the shrub the look of having been pruned. Ideally, the best pruning often *combines both thinning and heading cuts*. Thinning helps to open the center and heading helps to control the size and height. Again, the goal is not to look pruned!

1. Thinning Cuts: These types of cuts remove entire branches or shoots. *All* thinning cuts are made at the base of the branch *or* at ground level (Figure 3). These cuts are used to literally "thin" out the plant and stimulate more vigorous growth of the remaining branches. When done properly, the natural shape is maintained. This technique is especially useful for plants that have gotten too dense.

2. Heading Cuts: These cuts shorten but **do not** remove entire branches or shoots. Heading cuts stimulate the buds on the remaining portion of the branch or shoot to grow (Figure 4). This technique is used to promote a dense, more compact growth habit. It is also used to reduce

the overall size or height of a plant. Heading cuts can be used to “shape” the plant by cutting back to inward- vs. outward-facing buds. In order to maintain the natural growth of the plant, it is important not to top or cut all branches back to the same level. This leads to excessive, unattractive growth.

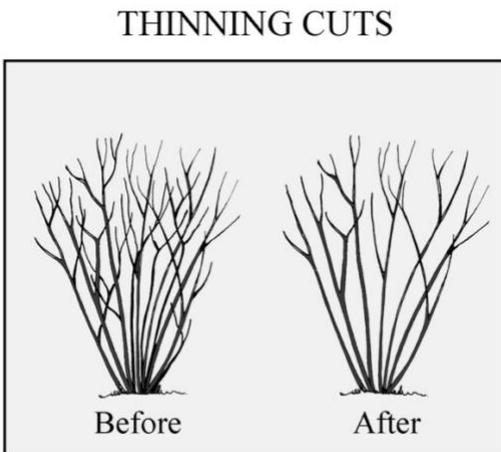


Figure 3. Thinning cuts made at the base of the branch.

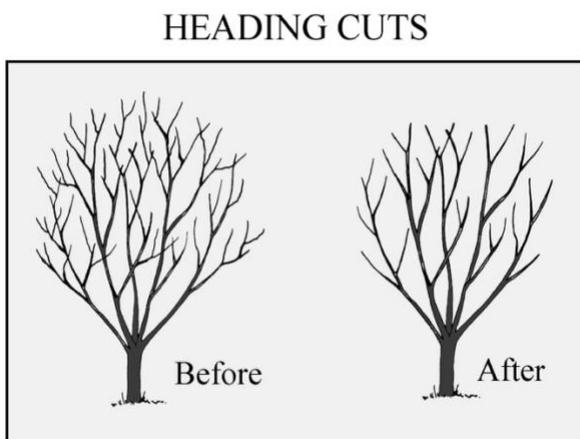


Figure 4. Heading cuts remove parts of branches.

Five Easy Steps to Pruning a Shrub

Step One:

- Before you make any cuts, it is important to develop a game plan or goal for your pruning. This can be as simple as knowing how you want the shrub to look when you are finished and some basic ideas as to how you might achieve that outcome.

- Walk around the shrub, assess how it looks, and think about its natural growth habit.
- What appears to be wrong (or right)? Is it too leggy? Too dense? Lopsided? Full of dead wood? Is it basically “okay” but needs some shaping?

Step Two:

- Start by pruning out all dead, diseased, or damaged branches or twigs. If tissues are diseased, make cuts at least several inches below visible symptoms and be certain to disinfect tools.

Step Three:

- Remove all crossing, rubbing, or misdirected branches and obvious water sprouts.

Step Four:

- Before doing any more pruning, walk around the shrub and note any differences in its appearance from your first assessment. Is additional pruning necessary to meet your goal or mental picture of the final outcome? Have you achieved your goal? Has your goal changed now that you’ve done some pruning? What else might need to be done?
- Approximately how much of the shrub have you already removed? (Remember: The rule of thumb for routine or maintenance pruning is to remove no more than 1/3rd of the branches at one time.)

Step Five:

- Most pruning mistakes are made by doing this step first!
- Final shaping of the shrub usually requires a combination of heading and thinning cuts. The approximate ratio of these cuts is determined by the condition of the shrub and the desired outcome. For example, if the shrub is too dense, most of the cuts would be thinning cuts; if the shrub is too thin, most of the cuts would be heading cuts.
- All final cuts should be made to enhance the natural form of the shrub.
- Your pruning efforts should produce a shrub that looks clean and is an asset to the landscape. A properly pruned shrub should not look “hacked” or “pruned.”

Pruning Young Trees

Pruning is the best preventive maintenance for young trees and is critical to developing the shape and structure of the tree. Pruning of newly planted trees should be limited to removing dead or broken branches. All other pruning should wait until the second or third year after planting to allow the tree to recover from transplant stress. The leader, the vertical stem at the top of the trunk, should never be pruned. Dead or damaged branches, inward-growing branches, potentially crossing branches, and branches with narrow V-shaped crotches should be pruned to eliminate potential problems, but pruning should not interfere with the natural shape of the tree. It is important to have no more than two branches at the same distance from the ground. Branches should be spaced vertically up the trunk in a radial pattern so that so no branch is directly above another branch. Tree pruning is often best done by a licensed and insured arborist, since they specialize in the care of trees. Arborists are trained in all aspects of woody plant health and care, including fertilizing, pruning, diagnosis and treatment of diseases, insect infestations, and environmental problems.

https://www.treesaregood.org/portals/0/docs/treecare/hire_arborist.pdf

Pruning References

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https://www.treesaregood.org/portals/0/docs/treecare/Pruning_youngTrees.pdf

https://hort.ifas.ufl.edu/woody/documents/ch_12_mw04.pdf

<https://www.fs.usda.gov/naspf/publications/tree-owners-manual-national-edition>

<https://www.thinktreesnm.org/>

Upcoming Webinars

February 27, 2021- **Pruning**, Amos Baca and Dennis Bacca

[\(https://www.jerichonursery.com/\)](https://www.jerichonursery.com/)

March 4, 2021- **Future Garden Favorites--SW Native Plants**, Jennifer Bousset, Ph.D.

[\(https://bernalilloextension.nmsu.edu/\)](https://bernalilloextension.nmsu.edu/)

March 6, 2021- **Rose Pruning**, Marisa Thompson, Ph.D.

[\(https://www.jerichonursery.com/\)](https://www.jerichonursery.com/)

March 11, 2021- **Fruit Tree Pruning**, Gus Westerman and Greg Felsen

[\(https://bernalilloextension.nmsu.edu/\)](https://bernalilloextension.nmsu.edu/)

March 17, 2021- **Pruning Basics for the Home Garden**, Marisa Thompson, Ph.D.

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