



Pruning Woody Plants

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Good pruning is necessary to preserve the general attractiveness of your landscape and to keep your ornamental plants healthy. Although forest trees grow quite well with only nature's pruning, landscape trees require a higher level of care to maintain their safety and aesthetics.



Reasons for Pruning

- To keep plants at the desired size.
- To remove all dead, diseased, broken and injured parts.
- To correct crossing branches, branches that grow back into the center or branches that form narrow-angled crotches.
- To remove suckers and water sprouts that disrupt the natural plant shape.
- To develop certain forms or shapes--formal, informal, espalier, etc.
- To encourage the best growth of flowers and fruits.
- To rejuvenate declining plants or get shrubs to flush out new growth.

Methods of Pruning

There are several different ways of pruning ornamental plants. The best method is to make selective pruning cuts to enhance the natural form or shape of the plant. This is accomplished by removing old branches of shrubs at ground level; cutting back some of the branches, removing dead, diseased, weak and broken branches; by removing crossing branches and those that grow back into the center of the plant; and by thinning out areas of the plant that become over-crowded. These methods are more difficult and time-consuming than shearing, but the results improve flowering, natural beauty, and general health.

Shearing or clipping the ends of plants results in a symmetrical shape usually much different from the natural shape of the plant. Hedge-type plants lend themselves to this type of pruning. The base of hedges should be wider than the top so that lower branches get enough light. Geometric outlines are useful for topiary or the most formal landscapes. Shearing or clipping, especially with evergreens but also with some deciduous shrubs, results in a bushy exterior with a brown or defoliated interior due to shading if not done properly.



Espaliers are trellis-trained trees or shrubs usually grown next to a wall. There are many variations in

espalier such as single and multiple Y-forms, fans, etc. Espaliers are sometimes done with fruit trees to provide easier access to the fruit.

Plants do not “heal” the way people do. When a plant is wounded, it must grow over and “compartmentalize” the wound. In effect, the wound is contained within the plant forever. As a rule, small cuts do less damage to plants than large cuts. This is why proper pruning (training) of young trees is critical. Waiting to prune a tree until it is mature can create the need for large cuts that the tree cannot grow over easily.

Proper technique is essential; poor pruning can cause damage that lasts for the life of the plant. Learn where and how to make the cut before picking up the pruning shears. Each cut has the potential to change the growth, so always have a purpose in mind before making a cut.

When to Prune

The best time to prune is during the dormant season when plant shape and form are easily visible. If you want to encourage new growth, prune in late winter or early spring. Plants have resources stored in their root systems, which will be allocated to the remaining branches and contribute to new growth. Don't prune in mid-spring while plants are leafing out. If you want to discourage new growth but shape up an established plant, prune in mid-summer. Don't prune early in the fall. This tends to produce late, immature growth. However, remove dead, diseased, broken, or injured branches at any time of year.

Prune sparingly immediately after planting, removing only branches damaged during the transplanting process. Wait to begin necessary corrective pruning until after a full season of growth in the new location.

Deciduous Shrubs: Deciduous shrubs are woody plants that lose their leaves each fall. Prune early-flowering types (those that bloom in March, April, May and early June immediately after flowering. Prune late-flowering deciduous shrubs (those that

bloom in late June, July and August) in late winter or early spring (late February, March and April).

Early-Flowering Shrubs: Prune shrubs that bloom in March, April, May and early June immediately after flowering.

Late-Flowering Shrubs: Prune shrubs that bloom in late June, July and in late winter or early spring (late February, March or early April).

Evergreen Plants: Most evergreens may be pruned in winter and early spring. Needle-type evergreens are often pruned twice: heavy cuts in early spring and a light tipping back of one-third to one-half the immature, soft, new growth in June. Do not prune evergreens in summer and early fall.

Broadleaf Evergreens: Prune broadleaf evergreens just before growth starts in the spring or immediately after flowering for those that formed flower buds the previous year. Cut back hedges in early summer or as soon as the new growth is complete.

Trees: It is easiest to prune trees when branches are bare in late winter. Trees that bleed can be pruned in early summer or fall. However, bleeding causes little permanent harm to the tree.

Pruning Trees

Use the 3-cut method for any branch you cannot support with your free hand (usually 1 inch and larger diameter). This method prevents bark stripping.

- 1) Saw a notch on the underside of large limbs several inches away from the trunk
- 2) Then, on the top of the branch, make your next cut just beyond the undercut to remove the bulk of the branch
- 3) Make the final pruning cut outside the bark-branch intersection or collar.

Follow natural target pruning principles for pruning tree limbs. Locate the branch collar (swollen area at the base of each branch). Then locate the branch bark ridge (dark area of compressed bark starting at the

branch crotch). Make your final pruning cut (third cut of the 3-cut method) outside the branch bark ridge and the branch collar. This way, you are cutting only branch tissue and not cutting into any trunk tissue. The plant is able to compartmentalize the wound and prevent decay from spreading into the trunk.

An arborist is a specialist in the care of individual trees. Many professional arborists belong to and are certified by the International Society of Arboriculture (ISA), which advocates and documents the correct procedures for pruning trees. You can learn more about proper tree pruning procedures by contacting the ISA through a local arborist or at their Website: www2.champaign.isa-arbor.com.

Pruning or removing trees, especially large trees, can be dangerous work. Leave this to the professionals who have the proper equipment and safety measures. To ensure that the proper practices are followed, follow only ISA-approved procedures and hire only ISA-certified professionals to perform tree work.

General Pruning Principles

How much pruning is needed? If the ornamental plant has been carefully selected for its location, a light annual pruning will usually be sufficient. Many plants, if chosen properly, will need no pruning at all once they have been shaped at an early age. In pruning, it is important to make cuts in relation to live buds that will grow to produce new branches and to eliminate any stubs that will fail to heal over and result in places of entry for insects and diseases. In general, you should always:

- Cut back to another branch or bud.
- Cut back into healthy wood.
- Make cuts that slant parallel to buds producing new growth.

Use Good Tools

Tools required for general pruning include a pruning knife, pruning shears, lopping shears, pruning saw, pole

pruners and hedge shears. Prune with sharp tools that are appropriate for the branch size.

Pruning

knife - Use on new growth that is still tender.

Pruning shears- Purchase a scissor-cut type of pruning shear rather than an anvil-cut type of pruning shear. Be sure to get a good pair; cheap shears are a poor value. Use on branches up to about the thickness of a pencil.

Lopping shears – Lopping shears have the same blade as pruning shears but with a longer handle for better leverage. Use on branches up to $\frac{3}{4}$ inch.

Pruning saw - Pruning saws are usually curved to allow better access between branches. Use on branches thicker than $\frac{3}{4}$ inches.

Pole pruners - The long pole on pole pruners extends your reach. A pruning shear blade for small branches and a saw for larger branches are usually mounted at the end of the pole. Use for tall shrubs or trees that you can't reach with regular pruners or saws.

Hedge shears – Either hand or electric hedge shears are used for shearing hedges and should not be used when doing selective pruning.

Do not apply wound dressing or tree paint to the cut surface after pruning. Wound dressings do not help the tree seal off the wound and can even attract bacteria, fungi and insects to their sticky surface. It is best to let the plant grow callus to seal off the wound as quickly as possible.

Careful Choice of Plants Reduces Pruning Problems

Choosing the right plant for each location will eliminate many pruning problems. Avoid using trees like Spruce or American Arborvitae for foundation plants (those planted at the base of the house). Use low-growing-type plants under windows.

How to Prune Some Popular Ornamental Plants

Arborvitae: Shape in late winter. Prune to forks with foliage remaining on all branches. Shear back new growth at the end of June if needed.

Azalea: Prune after flowering if needed. Cut back leggy stems to shape the plant. Prune to forks.

Birches: In early summer, remove branches that form weak, narrow crotches and branches that cover the main trunks so that the bark pattern is enhanced.

Boxwood: Cut out diseased or injured wood in late winter. Shear new growth at the end of June.

Crabapple: In late winter, prune to shape. Remove suckers and thin out competing branches.

Crepe Myrtle: In late winter, cut out all thin, weak wood and head back the remaining branches.

Dogwood: In late winter, prune to shape. Cut out sharply angled branches. Be sure all cuts are smooth and painted with tree paint.

Forsythia: After flowering remove all four-year-old wood to the ground. Try to keep a natural arching form.

Hemlock: Shape in late winter. Shear again in midsummer if needed.

Juniper: In late winter, prune to improve shape. Cut the tips of branches back to a fork. Can be repeated in late June if needed.

Magnolia: In winter, remove suckers. After flowering, prune only very lightly to improve form. Do not leave any stubs.

Maple: In summer or fall, prune to shape.

Oak: In winter, prune to shape.

Pine: In winter, prune to shape. Cut only to forks, and do not leave any stubs. To increase density, cut back candles (new growth) just as needles form.

Taxus or Yew: Shape in late winter. Cut back new growth in late June if needed.

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