

#### Quick Facts..

Pruning helps improve the health and safety of plants.

While pruning has a dwarfing tendency, it stimulates growth points into action.

In late winter before bloom, take out the oldest and weakest canes at or near the ground to reduce height, thin and improve flower quality.

Some shrubs may need some shoots cut back if outside influences, such as shade, cause the plant to become out of balance.

For most summer-flowering shoots, cut back all shoots in early spring to near the soil line.



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# TREES & SHRUBS

# **Pruning Shrubs**

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Pruning is an ancient practice that dates back thousands of years. Perhaps the most ancient reference to pruning pertains to grapes, on which severe pruning was and still is practiced to increase fruit production.

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Most books describe pruning as an art. Few, even in recent times, approach pruning as a science. As a result, references place emphasis on the shape and form and less on how a plant responds.

Concentrating on shape and form with little or no emphasis on the plant's response too often leads to butchering.

There is a big difference between **pruning** and **shearing**. Good pruning techniques always take the response of the plant into consideration by making cuts that improve the plant's health. Shearing results in formal, unnatural and usually unhealthy effects. It is indiscriminate and promotes weak growth.

Shearing a hedge, while attaining a desirable visual effect in a formal setting, ultimately results in a weaker, shaded-out plant.

## **Reasons for Pruning**

If you remove growth continually to control size, the result is shearing, not pruning. The plant probably is too close to a building or walkway. In these situations, correct pruning can rarely be practiced. It is correctly classified as shearing, not pruning.

Sound reasons for pruning should start with **improvement of plant health and safety**. This includes removal of diseased, insect-ridden, dying, interfering and weak growth. Properly done, this can promote better flowering, higher fruit quality in fruit trees, healthy foliage and safety.

Pruning to **shape** a plant can be legitimate, but exercise care. It is too easy to end up with a sheared plant during the shaping process.

One of the most violated horticultural practices pertains to deciduous shrubs. Perhaps you have read a statement similar to the following in one of the many pruning books or pamphlets: "Prune spring-flowering shrubs immediately after bloom." Or "head back spring-flowering shrubs after bloom." Or "the time to prune depends on bloom." These are neat little phrases and easy to remember. But they can result in poor pruning practices that result in shearing, not pruning, responses from the plant.

# **Basic Pruning Responses**

To a plant, pruning is a stimulus. While pruning has a dwarfing tendency, it stimulates growth or "awakens" otherwise resting growth points, called latent and adventitious buds, into action. These buds produce weak sucker growth.

When the tip of a shoot is cut, inhibitors to the lateral buds, including latent buds, are removed. Development of latent growth thus can take place.

Response, however, gradually lessens the farther you go back from the severed end. This response varies, depending upon the species of plant and certain environmental conditions. Fast-growing trees and shrubs usually respond more than slow-growing ones.

#### Why Prune?

In a sense, pruning deciduous shrubs is opposite to the practice employed when pruning a tree. In a tree we **drop-crotch**, leaving a leader to "dominate" or produce inhibitors to prevent latent bud growth. Topping does the opposite. In pruning a shrub, we normally want to encourage latent bud growth **from the base only**. If such pruning is done in late winter, annually, or at least as needed, heading-back of spring-flowering shrubs seldom is necessary.

This type of pruning (thinning and renewal) not only maintains a healthier, more attractive plant, but allows the gardener to do the major pruning work in the less busy season, namely the winter months.

#### Renewing an Overgrown Shrub

Overgrown shrubs usually are leggy. That is, they lack foliage on the lower one-half to two-thirds because of shading from the top. Flowering also is poorer in quality. The older canes, as is the case in lilacs, usually are infested with oyster shell scale, borers or some other pest problem.

Height reduction, thinning and improvement of flower quality can all be done in late winter before bloom by taking out the oldest and weakest canes at or near the ground line. This also reduces height without removing the healthiest flowering canes. The sprouts from the base will flower the second season and replace those left the previous year.

#### Preserving Stem Color

Some gardeners remove a few canes each winter. This is a sound practice for most deciduous, spring-flowering shrubs, especially if the plant is noted for attractive stem color, as in the case of shrub dogwoods, such as the red osier. Canes of these shrubs, when older than three years, lose their brilliance and often become grayish or brownish.

Remove about one-third of the canes, choosing the oldest and weakest each winter. This way, a shoot never overgrows and always maintains a healthy look. Heading-back from the top, if needed, usually is confined to a few odd branches.

#### Heading-Back

Some shrubs may need an occasional heading-back of isolated shoots because of outside influences, such as shade, that may cause the plant to become out of balance. There is no reason to wait until after bloom to apply corrective pruning measures. Simply drop-crotch as you would the top of a tree. Don't fall into the temptation of snipping here and there out of habit. Remove the offending branches — then quit!

#### Summer-Flowering Shrubs

One rule of thumb that might apply with little reservation is the often quoted "if the shrub flowers on the current-season wood, prune prior to flowering" (in late winter or early spring). Orange-eye butterfly bush (*Buddleia davidi*) and Anthony Waterer spirea (*Spiraea bumalda* A.W.) fall into this category.

In extreme northern climates, there is little choice because winter cold and drying usually cause dieback to near the soil line. Failure to remove these dead or weakened canes in spring results in an unsightly shrub later in the summer and will tend to crowd the shoots arising from the base. Crowded shoots and flowers will be weak.

Normally, for most summer-flowering shoots, a cut-back in early spring of all shoots to near the soil line is desirable.

#### **Special Cases**

Some shrubs have only a single main trunk and are really small trees. This includes several of the *Viburnum* species, *Euonymus* and shrubby forms of *Rhamnus*. Obviously, do not cut these shrubs to the ground. Treat them in the same manner as a small tree.

Occasional thinning of interfering, weak or excessive growth and stepping back by drop-crotch methods may be necessary. This should be done in late winter. When pruned later, damage to the new, succulent growth is inevitable.

## **Pruning Evergreens**

Most needled evergreens, such as pine, spruce, juniper and fir, need little or no pruning. Unfortunately, they often are sheared. Upright junipers are a classic case. Shearing is so common with juniper that it is difficult to find the natural shape. Sheared evergreens, like hedges, will always shade out on the inside and become more prone to snow damage.

Where a branch needs to be pruned away from an evergreen, follow the usual drop-crotching technique. Where more density is desired, as in pines, snap the "candles" in spring to promote lateral bud development. Remember, however, that this is a shearing practice, not a pruning practice.

For more information, see fact sheet 7.205, Pruning Evergreens.

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