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Pruning Deciduous Shrubs in the Landscape

Introduction

Pruning is a process with a purpose. Because shrubs are expensive to replace, we want them to be healthy, easily maintained, attractive, and possibly functional as barriers or windbreaks.

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Before pruning, study the plant to determine its natural form, growth rate, habit of growth, height, spread and time of flowering. This information is available in any good book on shrubs. In addition to its genetic characteristics, consider the effect of environmental influences (soil fertility, soil moisture, climate, and exposure) on a plant's growth rate.

Time of Pruning

Spring flowering shrubs are generally pruned immediately after bloom. They form their flower buds in mid- to late summer and bloom the following spring on one-year-old shoots. If you don't mind removing flower buds, spring pruning is not a problem.

Some examples of shrubs that bloom on last season's growth:

Cercis chinensis	Chinese Redbud
Chaenomeles japonica	Japanese Quince
Deutzia species	Spring-flowering deutzias
Forsythia species	Forsythias
Kerria japonica	Kerria
Lonicera species	Honeysuckle
Magnolia stellata	Star Magnolia
Rosa species	Rambling Rose species
Spiraea species	Spirea
Viburnum species	Vibumum
Weigela florida	Old fashioned Weigela
Syringa species	Lilac

Summer flowering deciduous shrubs are best pruned before growth begins in early spring. They form their flower buds on current season's growth.

Some examples of shrubs that bloom on current season's growth:

Abelia x grandiflora	Butterfly bush
Buddleia davidii or *globosa*	Japanese beauty bush
Clethra alnifolia	Summersweet
Hibiscus syriacus	Rose of Sharon
Hydrangea arborescens	Hills of Snow
Hypericum species	Saint Johnswort
Rosa species	Rose
Spiraea bumalda	Anthony Waterer Spirea
Symphoricarpos	Coralberry

Frequency of Pruning

Prune mature deciduous shrubs every year. This is necessary to control size, maintain an attractive shape, promote a vigorous healthy shrub, and to perpetuate flowering wood.

Tools Needed

Pruning tools include: sharp lopping shears, hand shears, pole pruner, and a saw. Hedge cutters are not recommended.

Prune With a Purpose

Pruning is the selective removal of stems and branches without changing the natural form of the shrub. A fast growing deciduous shrub in full sunlight can be pruned harder than a slower growing one.

When shrubs are thinned, the following responses occur:

- *Light is allowed into the center of the shrub, stimulating new shoot development.*
- *More flowering wood is developed throughout the shrub.*
- *Total leaf surface area is increased, resulting in a healthier plant.*
- *Increased air circulation within the shrub discourages certain pests.*
- *Size and shape of the shrub is easier to control.*
- *The natural form of the plant is revealed.*

Pruning Technique

Pruning deciduous shrubs follows the principle of thinning and renewal. Well-pruned shrubs contain stems of various ages.

A healthy shrub with good balance between its top and roots will produce three or four new shoots each year. If one or two of the oldest stems are removed and one or two of the strongest new shoots are saved, the shrub will renew itself each year with healthy, productive stems.

To rejuvenate a neglected or incorrectly pruned shrub (See Figure 1), remove 50 percent of the oldest stems at ground level and then make thinning cuts in the remaining middle and top regions of the shrub. (See Figures 2 and 3.)

The following spring remove another 25 percent of the remaining stems.

If a shrub has been neglected for several years, removing all the stems close to the ground may be the best choice. This practice will produce an abundance of new shoots which will require thinning each year. Lopping shears or a small fine-toothed handsaw are best suited for cutting off stems at ground level.

Thin the top with hand pruners or loppers, depending on branch diameter. Make each cut at the point where a branch meets another branch. Make the cut flush with no stub remaining for an insect or disease organism to enter. Thin out the tallest branches and ones that rub or grow sideways.

Severe pruning will often cause production of several new ground shoots. Thin these yearly, saving the strongest two or three. The ultimate goal is to develop a shrub containing 7 to 12 stems of different ages.
For most deciduous shrubs (lilac, spirea, forsythia, etc.), the natural form is a fountain shape. Plants can be maintained at a given height and width for years by following a thinning renewal process.

Shearing

Shearing is not pruning. While shearing may have a place in a formal setting, in New Hampshire, where most homes are incorporated into natural landscapes, less formal pruning techniques are recommended.

Most shrubs are sheared with hedge cutters, resulting in loss of natural shape and flowering potential. Sheared shrubs have more unproductive stems being maintained each year.

When the surface of a shrub is sheared, two or more buds may break at the base of each cut shoot. Shading from excessive surface growth reduces the total leaf surface of the shrub and inhibits new basal shoot development.

Shearing in late summer or early spring on spring-flowering shrubs removes most of the newly formed flower buds. The bloom, if any, is always concentrated on the surface of the shrub where new shoot growth is located.

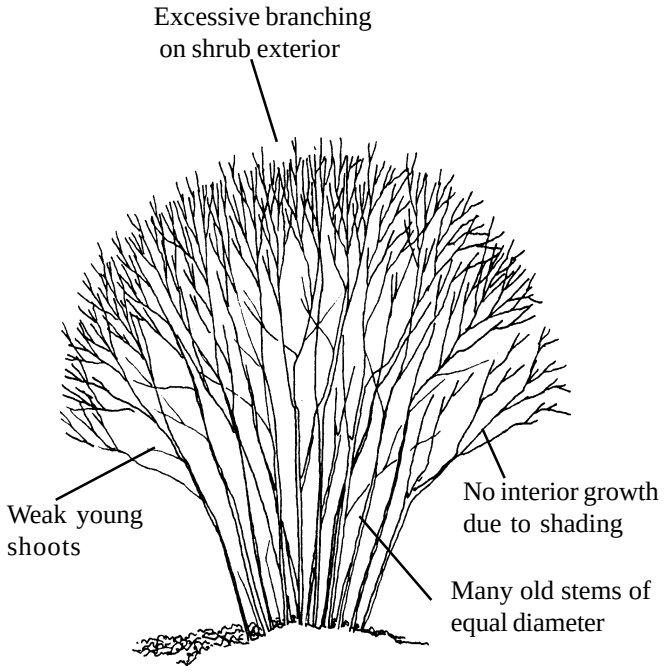


Figure 1. Characteristics of a sheared shrub.

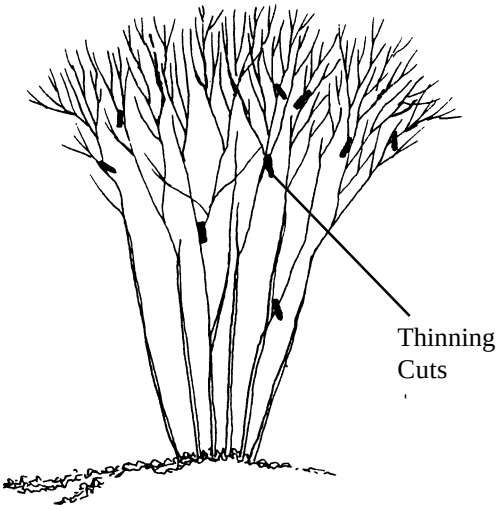


Figure 2. Fifty percent of the stems have been removed, followed by thinning cuts in the top half.

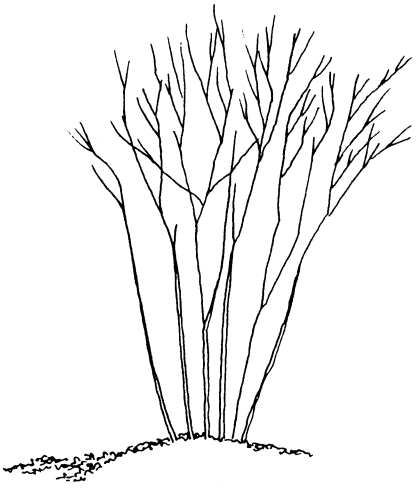


Figure 3. Stem and top thinning is completed.

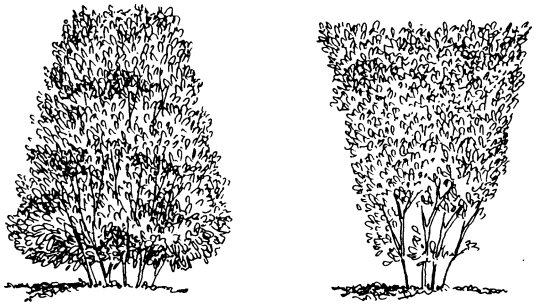
Hedges

Hedges serve as visual and physical barriers. A well-shaped hedge is the result of proper training from time of planting.

Plants are pruned to induce branching by cutting back shoots, leaving 6 to 8 inches of growth. For the next couple of years remove half the new growth to encourage additional branching.

The same principles used when pruning individual shrubs also apply to hedges. Do not shear, as shearing will cause dieback of branches. Proper thinning will promote small diameter branches that resist winter breakage.

Hedges should be pruned with a narrow top and wide base. This allows for good sunlight penetration throughout the shrub, resulting in strong shoot development. (See Figure 4).



(a) (b)

Figure 4. Shrubs with a wide base have greater sunlight penetration and total leaf surface area. (Left) Correct shape. (Right) Incorrect pruning and weak growth.

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