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Bulletin 150

PRUNING

Ornamental Trees & Shrubs

Pruning Ornamental Trees & Shrubs

Correct pruning is one of the most necessary but least understood of all common garden practices. Pruning, or the selective removal of branches while maintaining the natural form, is not the same as shearing, which is the clipping of all new shoots to create an artificial form. A good pruning job is seldom conspicuous. It is achieved only by first giving careful attention to the natural growth habit of the plant to be pruned—its trunk and branch structure, rate of growth, ultimate height and spread, and time of flowering and fruiting. For example, a fast-growing shrub that arches naturally, such as forsythia, should be pruned by removing the old-

est branches at ground level and by selectively thinning and heading back the other branches. In this way the natural form is preserved while the overall dimensions of the plant are reduced.

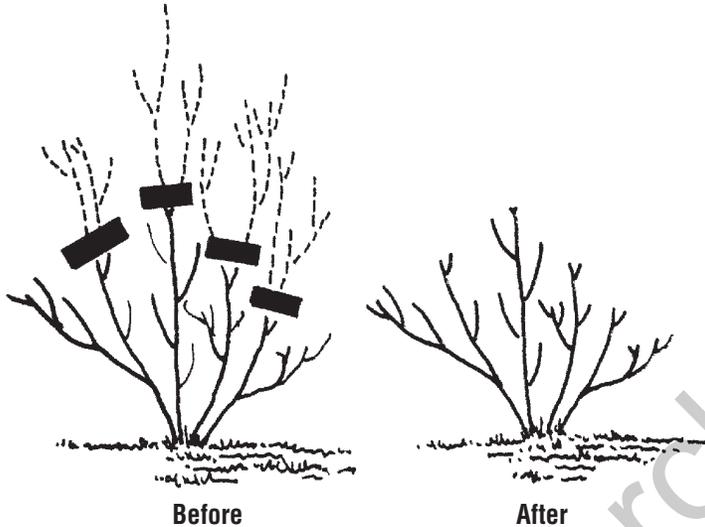
You should have a reason for every pruning cut. When you decide to remove a branch choose the actual location of the cut with special regard for the plant's response. Familiarity with the responses of your various plants to different pruning practices comes only through experience.

You can avoid much unnecessary work by careful pruning and training of young plants or by choosing plants whose ultimate size is appropriate to the situation.

Why Prune?

- **To remove all dead, diseased, or broken branches** and to help prevent insects and decay organisms from entering the plant.
- **To reduce size** when shrubs used in foundation plantings and other landscape settings have become overgrown.
- **To thin out trees and shrubs** to let light into the interior of fruiting plants, or to reveal interesting patterns of bark, trunk, or branch structure in specimen trees. Thinning can also help to reduce storm damage in shade trees with dense branching and foliage.
- **To remove dead flowers and seed pods.** On rhododendrons, lilacs, and similar plants the seed pods develop at the expense of new shoots and flower buds and therefore must be clipped off.
- **To rejuvenate a declining shrub.** Severe pruning will often produce vigorous new growth in many species that appear to be dying.
- **To make young shrubs more bushy.** Some shrubs may be cut to the ground after the first or second year so that new shoots will develop from the base of the plant (See list on page 11).
- **To develop a special form** as in hedges, espalier, or topiary work. This is sometimes accomplished by shearing rather than pruning.

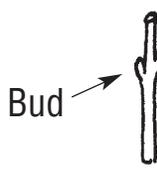
How To Prune



Wrong



Right



Wrong

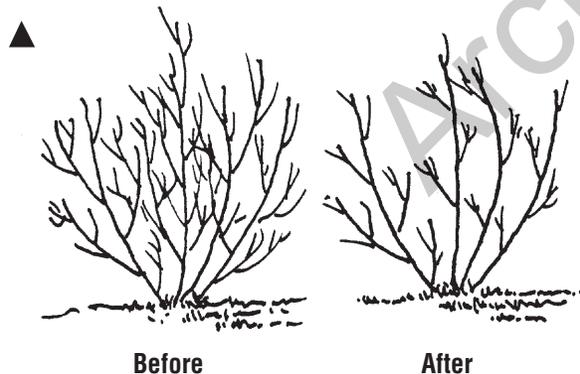
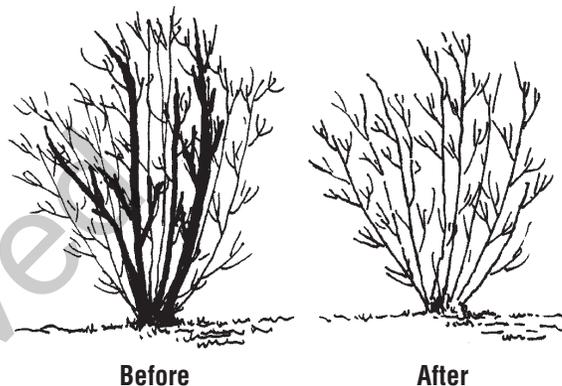


Right

Heading back, thinning, and renewal pruning are three methods you can use in making a plant conform to a specific location or use.

Heading back means removing the terminal portion of a branch by cutting back to a bud or another branch. Since new shoots develop from dormant buds, the shape of plants may be controlled by cutting back branches to an outward- or inward-pointing bud or branch, depending on the desired direction of growth. Heading back will stimulate the growth of shoots and make plants more dense. Unfortunately, this method is used indiscriminately too often without regard for the natural form of plants. Use heading back primarily on andromeda, azaleas, barberry, boxwoods, camellias, cherry laurel, cotoneaster, hollies, junipers, pyracantha, rhododendrons, yews, etc.

Thinning means removing branches and water sprouts by cutting them back to their point of origin on the parent stem. This is the least conspicuous method of pruning and results in a more open plant without stimulating excessive growth. This method of pruning is used primarily on such plants as crapemyrtle, hibiscus, lilac, magnolia, viburnums, smokebush, etc.

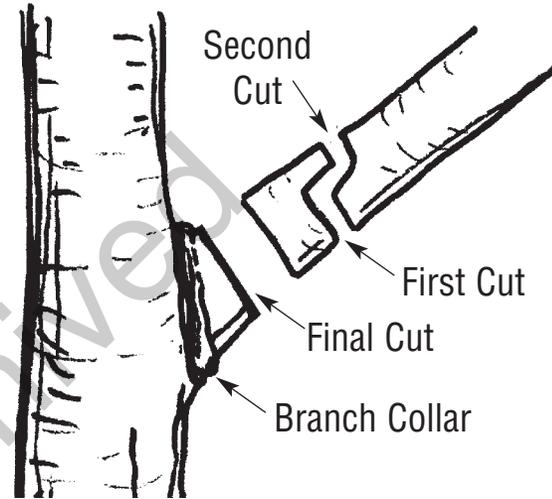


Renewal pruning means removing the oldest branches of a shrub by pruning them near the ground, leaving only the younger more vigorous branches. Also, remove stems less than pencil thickness in diameter. For some overgrown plants it may be advisable to do renewal pruning over several years. However, old, poorly developed plants should be cut flush to the ground to encourage new branches to develop. Use this method of pruning on such species as abelia, deutzia, forsythia, kolkwitzia, mockorange, spiraea, weigela, etc.



Root pruning reduces excessive shoot growth, promotes flowering, and facilitates transplanting. Fruit trees not on dwarfing

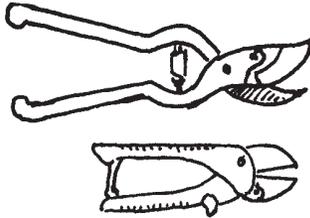
roots and wisteria can be forced into flowering by root pruning in July and early August. To reduce excessive shoot growth, root prune in the spring just before growth begins. To facilitate transplanting, root prune in the early spring or as soon as the first flush of growth stops in late spring or early summer. To root prune thrust a digging spade 8 to 10 inches deep in a circle. Dig a 5-inch radius for every 1-inch stem diameter. Since new roots will develop only at the cut surface, subsequent digging to lift the plant should be done outside the root-prune area. Root pruning is a common practice in the production of field-grown quality plants in nurseries. It is advisable to root prune large trees or shrubs 1 year before transplanting.



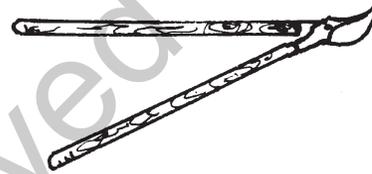
When pruning large branches from trees, first make two cuts (see above) to remove the branch without peeling the bark on the trunk. Make the final cut perpendicular to the branch on the branch side of the collar. Never cut the branch flush with the trunk. Never use tree wound dressing, paint, or shellac over the cut surfaces. To prevent water sprouts from developing, the cut surface may be treated with a sprout inhibitor.

Equipment You Will Need

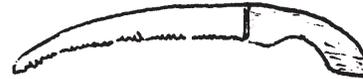
There are many good tools available. It is mostly a matter of taste in choosing which size or shape will prove most satisfactory for you. The basic essential is that the tools be sharp to give a good pruning cut. This leaves a smooth surface on the wound with no stubs, split branches, or torn bark.



Pruning shears should be handled so they will make a straight cut. Twisting the handgrips will place excessive strain on the joint and create excessive wear.



Lopping shears with long handles offer better leverage for cutting larger branches.



Pruning saws have narrow blades and their teeth are coarser than carpenter saws. The teeth are usually designed to cut on the pull stroke. A small curved pruning saw is useful for working on compact trees or large shrubs.

Pruning Tips

1. Never leave short stubs. Make all cuts perpendicular to the branch and as close as possible to the branch collar to encourage rapid healing.
2. Begin pruning hedge plants immediately after planting to stimulate dense branching from top to bottom. Prune newly planted privet hedges to within 6 inches of the ground immediately after transplanting. Severely prune young hedge plants such as privet when the new growth is 6 to 10 inches long.
3. To maintain uniform density, shear all hedge plants with the top more narrow than the bottom. This will allow sufficient light to reach the bottom foliage.
4. Never use tree wound dressing on pruned surfaces except for cosmetic purposes. In such instances, the dressing should be applied as thinly as possible.
5. To minimize the development of water sprouts on crabapples, apples, crapemyrtle, lilac, and viburnum plants, delay pruning until midsummer or treat all pruned surfaces with sprouting inhibitor chemicals.
6. Never top a shade tree. This causes many suckers to grow that are weak and that break off when they become large branches. If a tree must be reduced in size, thin it by pruning entire branches at their point of origin.

When To Prune

Each tree or shrub has its special pruning time, depending on the time of year it produces flowers or fruits.

- Prune those that flower before the end of June immediately after flowering. Since flower buds develop during the prior growing season, fall, winter, or spring pruning will reduce the spring-flowering display.
- For plants that flower in summer or autumn, prune them in the winter or spring before new growth begins; these plants develop flowers on growth produced during the spring.
- Delay pruning plants that are grown for their ornamental fruits, such as cotoneasters, pyracanthas, and viburnums, until after the fruit drops.
- Prune hollies and other evergreens during the winter if their branches will be used for Christmas decorations. However, save severe

pruning of evergreens for early spring only. New growth at this time will soon overgrow any disfigurement caused by pruning.

- Some trees, such as birch, maples, dogwood, elm, walnut, and yellowwood exude an excessive amount of sap from pruning wounds made in late winter or early spring. Prune such trees in the autumn.
- In general, avoid heavy late summer pruning, since any new growth that develops will not have time to mature sufficiently to survive low winter temperatures. Of course, prune and repair any plants that are damaged by storms, as soon as possible no matter what the season.

Roses

Renewal prune spring flowering, climbing roses as soon as they finish flowering. Prune hybrid teas, floribundas, and everblooming roses in the early spring just as the buds begin active

growth. Treat all pruned surfaces on roses with a heavy application of tree wound paint immediately after pruning to protect them from rose-cane borers. In the fall cut back canes of hybrid teas and floribundas to within 30 inches to prevent whipping by winter winds.

Conifers (Needle-leaf evergreens)

Plant the larger conifers such as fir, spruce, and pine only in areas where heavy pruning will not be necessary, since new shoots will not develop from cuts made in the older wood. Most conifers used in foundation plantings should be pruned every year. Once they have become overgrown it is usually too late to begin corrective pruning.

Yews, junipers, hemlocks, false-cypress, and arborvitae may be headed back in spring or summer. These are the only conifers that will respond to severe pruning, which should be done in early spring if necessary.

Firs and spruces may be lightly pruned in late summer, fall, or winter after growth is completed. Leave the side buds that are present along the twigs. Never cut the central leader.

Pines may be lightly pruned in early June to increase density by removing the bud plus an inch or so of the young shoots. If large cuts are made, new branches will arise only in the area where needles are present along the stem.

Prune After Flowering

The following plants develop flowers on old wood; therefore, prune them immediately after flowering.

Shadbush, *Amelanchier*
Chokeberry, *Aronia*
Sweetshrub, *Calycanthus*
Camellia, *Camellia japonica*
Bittersweet, *Celastrus*
Redbud, *Cercis*

Flowering Quince, *Chaenomeles*
Fringe-tree, *Chionanthus*
Dogwood, *Cornus*
Deutzia, *Deutzia*
Pearlbush, *Exochorda*
Forsythia, *Forsythia*
Common Hydrangea, *Hydrangea macrophylla*,
'Hortensis'
Winter Jasmine, *Jasminum nudiflorum*
Mountain Laurel, *Kalmia latifolia*
Kerria, *Kerria*
Saucer Magnolia, *Magnolia soulangiana*
Crabapple, *Malus*
Mockorange, *Philadelphus*
Andromeda, *Pieris*
Flowering Cherries, *Prunus*
Azaleas, *Rhododendron*
Rhododendrons, *Rhododendron*
Climbing Roses, *Rosa*
Bridalwreath, *Spiraea prunifolia*
Baby's-breath Spirea, *S. thunbergii*

Vanhoutte Spirea, *S. vanhouttei*
Lilacs, *Syringa*
Tamarisk, *Tamarix*
Koreanspice Viburnum, *Viburnum carlesii*
Snowball Viburnum, *V. opulus 'Roseum'*
Weigela, *Weigela*
Wisteria, *Wisteria*

Prune While Dormant

These plants flower in summer or autumn on new wood; therefore, prune them during the winter or spring while they are dormant.

Abelia, *Abelia grandiflora*
Indigobush, *Amorpha fruticosa*
Groundsel-tree, *Baccharis halimifolia*
Japanese Barberry, *Berberis thunbergii*
Butterfly Bush, *Buddleia davidii*
Beautyberry, *Callicarpa*
Sasanqua Camellia, *Camellia sasanqua*
Jackman Clematis, *Clematis jackmanii*

Sweet Autumn Clematis, *C. paniculata*
 Summersweet, *Clethra alnifolia*
 Smoke-tree, *Cotinus coggygria*
 Rose of Sharon, *Hibiscus syriacus*
 Snowhill Hydrangea, *Hydrangea arborescens*
 'Grandiflora'
 American Holly, *Ilex opaca*
 Crapemyrtle, *Lagerstroemia indica*
 Bush-clover, *Lespedeza*
 Regel Privet, *Ligustrum obtusifolium*
 'Regelianum'
 Hybrid Tea Roses, *Rosa*
 Anthony Waterer Spirea, *Spiraea bumalda*
 'Anthony Waterer'
 Black-haw, *Viburnum pruniflorum*
 Chaste-tree, *Vitex*

Shrubs That May Be Cut Back

Certain shrubs will withstand cutting back to the ground. The time of year depends on the flowering season as in the previous lists. Those

marked with an asterisk (*) should be cut back annually while dormant.

*Butterfly Bush, *Buddleia davidii*
 Red- and Yellow-stem Dogwoods, *Cornus spp.*
 Forsythia, *Forsythia*
 Common Hydrangea, *Hydrangea macrophylla*
 'Hortensis'
 *Snowhill Hydrangea, *H. arborescens*
 'Grandiflora'
 Kerria, *Kerria*
 *Bush-clover, *Lespedeza*
 Privets, *Ligustrum*
 Climbing Roses, *Rosa*
 Anthony Waterer Spirea, *Spiraea bumalda*
 'Anthony Waterer'
 Vanhoutte Spirea, *S. vanhouttei*
 Lilacs, *Syringa*

Repairing Damaged Tree Trunks

Physical damage done to the trunks of trees requires special attention. All loose bark from the edges of the wound should be trimmed back to where it is firmly attached to the sapwood. Carefully remove all shredded sapwood, and leave a smooth surface. Leave old wounds undisturbed especially if callus tissue has developed along the outside edge of the wound. Trees protect themselves from invasion by decaying

organisms. This is a natural process called compartmentalization. The callus tissue that forms along the outside edge of an old wound is part of that defense mechanism. Never scrape away sound deadwood from tree wounds. Only remove loose or decaying wood without damaging live tissues. Pruning very large trees can be dangerous and is best performed by a licensed and certified arborist.

At Your Service

Maryland Cooperative Extension has other publications and resources to help you. A complete list of Extension publications as well as gardening advice is available from the Home and Garden Information Center at:
1-800-342-2507 Web site: <http://www.agnr.umd.edu/users/hgic>

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