



Cooperative Extension

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Why Prune?

Pruning is the selective removal of specific plant parts for the benefit of the whole plant. Some reasons to prune are to train a plant, maintain plant health, improve the quality of flowers, fruits and stems, restrict growth, remove damaged and diseased branches, and to increase air circulation that can decrease specific plant diseases.

When to Prune

Spring-flowering shrubs bloom on one-year-old wood that grew the previous summer. They generally bloom before the end of June and should be pruned immediately after flowering. If these shrubs are pruned before flowering, the flower buds that developed last year will be removed, reducing or eliminating flowering.

Summer-flowering shrubs bloom from buds that developed on new wood that grew in the spring of the current year. These species should be pruned in late winter or early spring to promote vigorous growth early in the summer.

DO NOT prune spring- or summer-flowering shrubs in late summer or early fall (after mid-August through leaf fall). Pruning is an invigorating process that stimulates new growth which may not "harden off" by winter. This may lead to cold damage or winter injury. The EXCEPTION is dead, diseased, damaged or double-crossed limbs (the Four Ds) that should be pruned out at

any time. DO NOT prune newly-planted shrubs unless limbs are damaged. Newly-planted shrubs need all the leaves possible to encourage root regeneration.

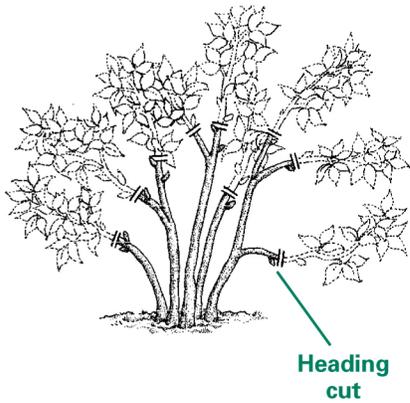
What to Prune

Observe the plant. The first consideration for removal should be wood that is dead, diseased, damaged or double-crossed as mentioned above. Then remove suckers (found at the base of the plant) and water sprouts (growing thick and straight up through the plant). Older wood that has ceased to flower should also be removed.

The object of pruning is to open up the top of the plant to permit light and air to reach the interior. This aids in flower bud formation and reduced disease incidents. Consider the "one-third rule": remove about one-third of the oldest wood at the ground level and cut back one-third of the younger, newer canes about one-third of their height per season. This also results in the continuous renewal of the plant.

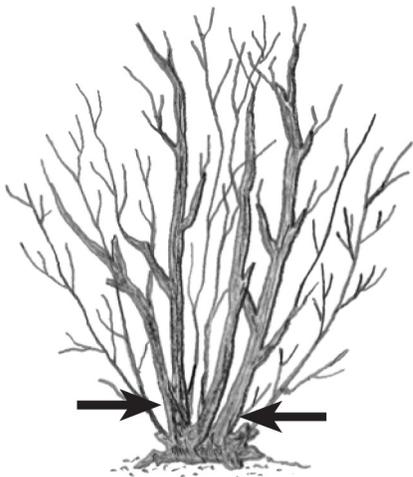
How to Prune

There are two basic types of pruning cuts: heading cuts and thinning cuts. Heading cuts remove part of a branch back to a bud. The direction in which the top remaining bud is pointed will determine the direction of new growth. Selective heading cuts will reduce the shrub's height and retain its natural form.



Heading cut

Thinning cuts remove an entire limb to the point where it originates. This opens up the canopy and increases light penetration and air circulation. Thinning cuts can be used to reduce the overall size of the plant without significantly changing its natural form. When one-third of the plant's oldest stems are cut to the ground, it is called renovation or renewal pruning. This can be done in spring or summer.



Renovation/Renewal Pruning

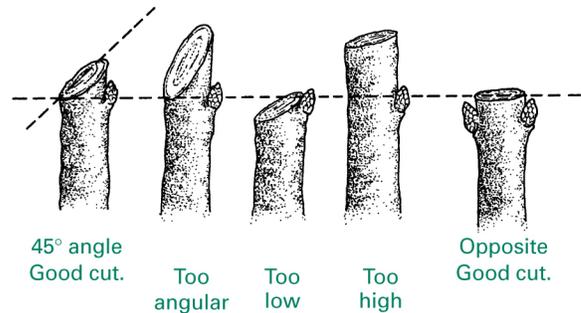
When all the stems are cut within six inches from the ground in the early spring before growth starts, it is called rejuvenation pruning. Rejuvenation is typically done no more than every three to five years. It works well on multi-stemmed, twiggy shrubs such as Berberis, Buddleia, Chaenomeles, red-twig dogwood (Cornus), Cotinus, Forsythia, Hydrangea, Kolkwitzia, Ligustrum, Lonicera, Philadelphus, Potentilla, Rhus, Spirea and Weigela.

Shearing is a quick, easy and common pruning technique. However, frequent shearing does not encourage new growth from the base of the plant, which is needed to promote flowering. Shearing removes most of the flower buds and encourages thick outer foliage growth that shades out the interior and bottom of the plant. Shearing destroys the natural appearance of the plant. Over time, the shrub becomes

woody with lots of dead branches and few flowers. Replacement is the best option to refresh the landscape.

Make pruning cuts correctly. For heading cuts, prune $\frac{1}{4}$ inch above the bud, sloping down and away from it at a 45 degree angle. Avoid cutting too close or steep, or the bud may die. Make thinning cuts just above the side branches and roughly parallel to them. Keep in mind the direction that you want the new stem to grow and select for a bud that faces in that direction.

Pruning cuts in relationship to stem buds



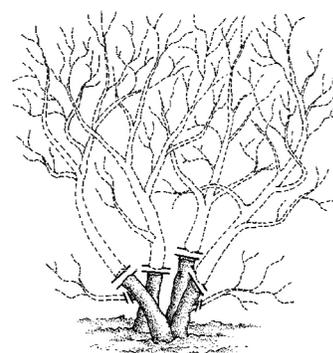
DO NOT use wound dressing or paint on pruning cuts. These materials do not prevent decay or aid in healing. When pruning dead and diseased branches, make thinning cuts into healthy wood. Disinfect tools between each cut with rubbing alcohol (a small spray bottle works well).

Formal hedges should be pruned to allow sunlight to reach all parts of the canopy, including the base of the plant. A properly pruned hedge has a wide base and narrower top, like a modified pyramid. A hedge with a narrow base and wide top will have little foliage or flowers at the bottom due to the lack of light.

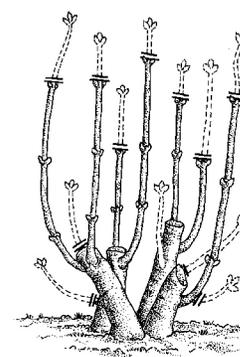
Some roses bloom on current season's growth and tend to be repeat bloomers and will flower almost continuously from early summer until frost (hybrid tea, grandiflora, floribunda, some ramblers and climbers, depending on variety/cultivars). These roses should be pruned in the spring after winter protection is removed. Some roses bloom on the previous season's growth and are once-blooming types that have a single flush of flowers in early summer (Albas, Damask, Gallica, moss, some ramblers and climbers, depending on variety/cultivar). Spring pruning should be limited to removing dead or diseased canes. Summer pruning (after bloom and before mid-August) can be done to shape up these roses.

Illustrations used with permission. VanDerZanden, Ann Marie and Diane Nelson. 2004. Pruning Ornamental Shrubs, PM 1958, Iowa State University Extension, 8 pp.

Spring-flowering shrubs (prune after flowering)	
Botanical Name	Common Name
<i>Amelanchier</i>	shadblow
<i>Berberis</i>	barberry
<i>Calycanthus</i>	sweetshrub
<i>Chaenomeles</i>	flowering quince
<i>Cornus spp.</i>	dogwood
<i>Cotinus</i>	smokebush
<i>Cotoneaster</i>	cotoneaster
<i>Daphne</i>	daphne
<i>Deutzia</i>	deutzia
<i>Euonymus</i>	euonymus
<i>Forsythia</i>	forsythia
<i>Fothergilla</i>	fothergilla
<i>Hamamelis</i>	witch-hazel
<i>Hydrangea arborescens</i>	smooth hydrangea
<i>Hydrangea paniculata</i>	Pee-gee hydrangea
<i>Kerria</i>	kerria
<i>Kolkwitzia</i>	beautybush
<i>Laburnum</i>	laburnum
<i>Ligustrum</i>	privet
<i>Lindera</i>	spicebush
<i>Lonicera</i>	honeysuckle
<i>Philadelphus</i>	mock orange
<i>Physocarpus</i>	ninebark
<i>Pieris</i>	andromeda
<i>Pyracantha</i>	firethorn
<i>Rhododendron</i>	rhododendron and azalea
<i>Ribes</i>	currant
<i>Rosa spp.</i>	roses
<i>Spiraea spp.</i>	bridal wreath spirea
<i>Syringa</i>	lilac
<i>Viburnum</i>	viburnum
<i>Weigela</i>	weigela
<i>Wisteria</i>	wisteria



Rejuvenation Pruning



Summer-flowering shrubs (prune before spring growth begins)	
Botanical Name	Common Name
<i>Abelia</i>	glossy abelia
<i>Buddleia</i>	butterfly bush
<i>Callicarpa</i>	beautyberry
<i>Caryopteris</i>	bluebeard
<i>Ceanothus</i>	New Jersey tea
<i>Clethra</i>	summersweet
<i>Hibiscus</i>	rose of Sharon
<i>Hydrangea macrophylla</i>	bigleaf hydrangea
<i>Hypericum</i>	St. Johnswort
<i>Itea</i>	sweetspire
<i>Potentilla</i>	cinquefoil
<i>Rhus</i>	sumac
<i>Rosa spp.</i>	rose
<i>Spiraea x bumalda</i>	Anthony Waterer spirea

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