



# Pruning Landscape Shrubs



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Shrubs placed on your home grounds should be kept healthy and vigorous so they will continue to be attractive in form, height, flower, and fruit. This means annual pruning is as important as regular watering and fertilizing of your plants.

People often wait until their plants have grown beyond their bounds—too tall or too bushy—before they use their pruners. Often it's too late to salvage shrubs at this point. Rather than allowing this to happen, shrubs should be checked every year and pruning attention given to the following situations.



**Figure 1.—TOP:** Yellow-twig dogwoods are like many other multistemmed shrubs—they develop abundant suckers, dark-colored, thick older branches, and declining branches with telltale unthrifty-looking bark. All of these types of branches should be removed annually. In general, any 3-year-old wood should also be removed. **BOTTOM:** This is the same plant after pruning. A large number of branches were removed without changing the shrub's form or multistemmed character. Note that no stubs remain.

## Prune Dense Growth Which Needs to Be Thinned

Air and light are necessary for leaves on inside and lower portions of the plant to function. As plants become crowded, light, moisture, and air infiltration are reduced. Don't wait until plants are severely overcrowded to start thinning them; make cuts annually when you start seeing reduced growing space.



**Figure 2.—**The pruning lopper for removing branches at soil level is correctly placed here. The entire suckering branch is removed from this *Viburnum* sp.

Dead wood and unthrifty branches should be pruned as soon as they appear, since they detract from the overall appearance of your plant.

### **Prune for Best Show of Flowers and to Encourage Abundant Fruit Production**

Give branches enough room to display flowers and fruits without interference from other branches that cross over or are spaced too closely. Usually spaces of 8 to 12 inches between branches are best for good flower and fruit size. This ample space also helps to reduce insect and disease problems occurring on the flowers and fruits.



**Figure 3a.**—Look for dark, discolored areas and cracked bark as indications of diseased branches. These branches need to be removed as such symptoms appear.



**Figure 3b.**—A pruning saw is shaped to fit into small areas like this one. It should be positioned so as not to rub on nearby valuable branches. Pruning saws, unlike carpenters' saws, cut on the pull stroke, thus making pruning easier.



**Figure 3c.**—Once the big part of the diseased branches is removed, you can position the saw better to take out the remaining stub as close to the soil line as possible.



**Figure 3d.**—After diseased stems are removed, check for branches that cross over. As these branches expand in diameter they rub together, causing open wounds on both. Choose one to remove; in this case, the smaller branch is cut out.



**Figure 3e.**—Removing diseased and crossover branches results in a desirable open character, such as with this multistemmed shrub.





**Figure 4.**—This Rose of Sharon shrub, though still small, is pruned each year to remove branches that are too close together. When it blooms, the number of flowers may be reduced, but generally each flower will be larger and showier. **LEFT:** Before pruning. **CENTER:** Correct cuts for removing branches so no stubs are left. **RIGHT:** After pruning has been done—notice opening of plant after excess growth has been pruned.

## Prune to Encourage Flower Production Every Year

Pruning at the wrong time of year may reduce or even eliminate one season's bloom. For this reason, follow these three guidelines in pruning your particular flowering shrubs.

**1. Shrubs that flower before June should be pruned during or immediately after flowering.** They bloom on wood formed the previous summer. By pruning them right after they bloom, you are allowing maximum time before winter to develop the wood for next season's show of flowers. If pruned during the winter or before flowering in the spring, flower buds are removed and blossoms are reduced or eliminated for the coming season. Examples of early flowering shrubs in this category are listed below.

### Spring flowering shrubs which should be pruned from after flowering until the end of June

Scientific Name	Common Name
<i>Berberis sp.</i>	Barberries
<i>Calycanthus floridus</i>	Sweet shrub
<i>Caragana sp.</i>	Pea shrub
<i>Chaenomeles sp.</i>	Flowering quince
<i>Cotinus coggygria</i>	Smoke tree
<i>Cornus mas</i>	Cornelian cherry
<i>Deutzia sp.</i>	Deutzias
<i>Forsythia sp.</i>	Forsythias
<i>Ilex sp.</i>	Hollies
<i>Kalmia latifolia</i>	Mountain laurel
<i>Kolkwitzia amabilis</i>	Beautybush
<i>Ligustrum sp.</i>	Privets or Ligustrums
<i>Lonicera sp.</i>	Honeysuckles
<i>Magnolia sp.</i>	Magnolias
<i>Philadelphus sp.</i>	Mock oranges
<i>Pieris sp.</i>	Pieris Andromedas
<i>Pyracantha sp.</i>	Firethorns
<i>Rhododendron sp.</i>	Azaleas and Rhododendrons
<i>Rhodotypos scandens</i>	Black jetbead
<i>Spiraea sp.</i>	Thunberg spirea, Bridalwreath spirea
<i>Styrax japonica</i>	Japanese snowball
<i>Syringa sp.</i>	Common, Chinese, and French lilacs
<i>Viburnum sp.</i>	Viburnums



**Figure 5.**—Forsythia bushes produce excessive growth at the base, and long weak shoots extend far into the air. After this shrub blooms, two types of pruning should be done. First, older branches should be thinned at the soil level. Once the large major stems are removed from the center, the remaining long shoots should be shortened by heading back cuts to an outside facing branch or bud. The outside facing branchlet will elongate in the direction which it presently faces.

**2. Shrubs that flower after June first should be pruned in the winter or spring before new growth begins.** They bloom on wood formed during the current spring or summer. Examples of summer flowering shrubs are listed below.

**Summer flowering shrubs which should be pruned before spring growth begins**

Scientific Name	Common Name
<i>Acanthopanax sieboldianus</i>	Fiveleaf aralia
<i>Abelia grandiflora</i> *	Glossy abelia
<i>Buddleia davidii</i> *	Butterflybush
<i>Callicarpa</i> sp.	Beautybush
<i>Clematis</i> sp.	Clematis
<i>Clethra alnifolia</i>	Summersweet clethra
<i>Hibiscus syriacus</i>	Rose of sharon
<i>Hydrangea arborescens</i>	Hills of snow
'Grandiflora'	hydrangea
<i>Hydrangea paniculata</i>	Peegee hydrangea
'Grandiflora'	
<i>Hydrangea quercifolia</i>	Oakleaf hydrangea
<i>Lagerstroemia indica</i>	Crape myrtle
<i>Rosa</i> <i>hyb.</i>	Hybrid tea rose

\*Glossy abelia and butterflybush require considerable pruning. Prune before spring growth and again after it blooms.



**Figure 6.**—This Hills of Snow hydrangea blooms on new wood. Some people mow it off with a lawnmower in late fall or early spring. This hydrangea needs to be cut completely back before growth starts in the spring. **TOP:** Before pruning. **BOTTOM:** After pruning.

**3. Certain shrubs may be pruned lightly before and after flowering.** This will often increase flowering and fruit production and may result in a second bloom during the year. Examples of this group are listed below.

**Shrubs which may be pruned both before and after bloom**

Scientific Name	Common Name
<i>Abelia grandiflora</i>	Glossy abelia
<i>Buddleia davidii</i>	Butterflybush
<i>Cornus sericea</i>	Red twig dogwood
<i>Cotoneaster apiculatus</i>	Cranberry cotoneaster
<i>Cotoneaster divaricatus</i>	Spreading cotoneaster
<i>Cotoneaster multiflorus</i>	Multiflora cotoneaster
<i>Mabbonia aquifolium</i>	Oregon grapeholly
<i>Spiraea bumalda</i>	Anthony Waterer and frobel spirea
<i>Symphoricarpos albus</i>	Snowberry
<i>Symphoricarpos chenaulti</i>	Chenault coralberry
<i>Wiegela florida</i>	Wiegela

**Prune to Direct Growth—To Shape Plants the Way You Want**

Knowing how plants respond to pruning helps you shape plants to the form and size you want. **Every time you pinch back growth with your fingers or make a pruning cut with shears, you stop plant growth in one direction and start it in another.** Always prune to a growing point which faces in the direction you want the plant to develop.



**Figure 7a.**—Before pruning. Hollies (like this Foster #2 Holly) have a compact pyramidal growth habit. Occasionally, pruning cuts are necessary to keep this desirable shape. You see two branches—one on the left, one on the right—which tended to grow faster than the other branches on the tree. Removal of these branches returns the plant to a desirable shape, and no unsightly stubs are left. In fact, it is hard to see where the cuts were made.



**7B:** Removal of one of the branches showing erratic growth.



**7C:** After pruning.

## Prune to Unusual Forms (Espalier, Topiary)

Plants that you train for decorating purposes require pruning more often than once a year. **Espaliering** is the practice of training a tree or shrub to grow flat. Almost any tree or shrub can be trained flat by continually removing growing points that go in unwanted directions. Allow the rest of the growing points to develop in their own way.

Before placing a plant right next to your house for espaliering, it may be wise to place an iron or wooden support a few inches away from the house if you suspect you will want to remove the plant some day. This prevents any disfiguration of the wall from roots or holdfasts of the plant on your brick or wooden walls.

**Topiary** is a shearing technique occasionally done on boxwood, juniper, pyracantha, yew, and privet. Part the branches to find a basic form you can work with. Cut off limbs you don't want. Wherever you want to form a clump, leave some side branches and shear them to the outline you desire. Leave a clump at the end of each branch you plan to keep, and shape the branchlets to the desired form. Remove all twigs and leaves along branches between clumps. If clumps aren't as full as you'd like, be patient. Each season new branches and leaves will fill in the areas. Some of these will need to be snipped or rubbed off.



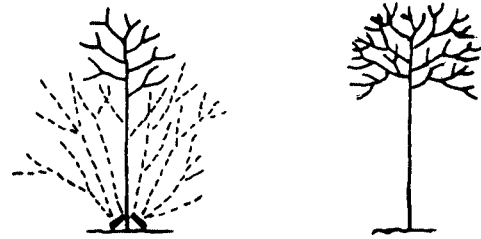
**Figure 8.**—Pyracantha sp. (firethorn) is a popular plant for growing on walls. **TOP:** a carefully pruned Pyracantha sp. with neat, well-placed branches. **BOTTOM:** A closeup of the same plant with arrows to indicate where to pinch new growth.



**Figure 9.**—*Summer and winter scenes of juniper topiary. Overgrown junipers are good candidates for this type of selective ornamental pruning. Don't expect your plant to look like these one year after you start topiary pruning, but with annual care, they will assume similar desirable form in several years.*

### **Prune to Transform Shrubs into Trees**

Many shrubs can be transformed into single-stemmed or multistemmed trees. Remove as many vertical stems as you wish (to one superior stem or several strong stems). Then remove side branches between ground level and head height. Old shrubs can take on a new look and interest as small trees. In addition, you are opening the bottom area for new plantings.



**Figure 10.**—*Remove unwanted side branches and suckers the first year. The "tree top" can be shaped later.*



**Figure 11.**—This European cranberry viburnum was a mass of branches clumped tightly together. **TOP:** In an effort to reshape the plant once more into a healthy-looking, open, less cluttered specimen, the multistemmed shrub was made into a four-trunked tree. **BOTTOM:** Branches in the top of the shrub were thinned; additional thinning and reshaping are needed in subsequent years to achieve a desirable form.

## Prune to Get Rid of Freeze Damage

Before removing what looks like freeze damage, make sure that's what it is. Examine stems for live leaf buds. Buds that are withered and brown inside when you cut them open are dead. Also, check the cambium layer between the bark and heartwood. Scrape through the bark with your fingernail or a dull knife. Brown tissue is dead; green tissue is alive. Once you locate the first live bud and live cambium in the stem, prune branch tips to that point of live tissue.

The roots and base of plants that apparently have been killed to the ground should be left for at least one year. Sometimes they have buds just below the soil surface that will activate and grow.

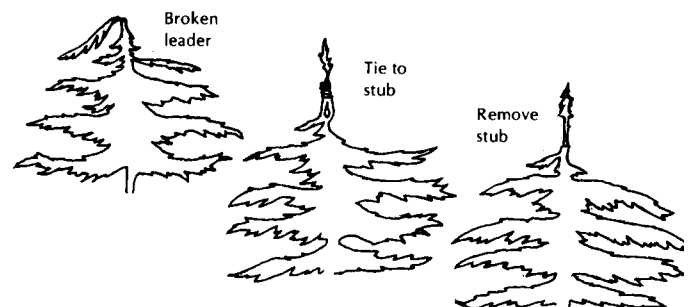
Conifers that show brown needles and bare twigs in spring may be suffering from freeze damage. If one-third or fewer needles have dropped and buds aren't destroyed, the shrub should recover quickly. After new growth starts, remove twigs that have totally dropped their needles. If the inside of the twig is brown, it's dead; if it's green, it's alive.

Where more than two-thirds of the needles have dropped, careful, selective pruning for two or more years may help bring the plant into decent shape and health. Hopefully, dormant side buds will activate when dead terminals are removed and new leaders can be developed from these side branches.

## Pruning Conifers

Evergreen conifers fall into two broad categories. Spruce, fir, and most pines are whorl-branching types with branches radiating out from the trunk. Junipers, hemlocks, *Taxus* (yews), and arborvitae are random-branching conifers with branches sprouting in a random fashion from the trunk or roots. *If the right-sized plant is used in the first place, little or no pruning is usually required on conifers.*

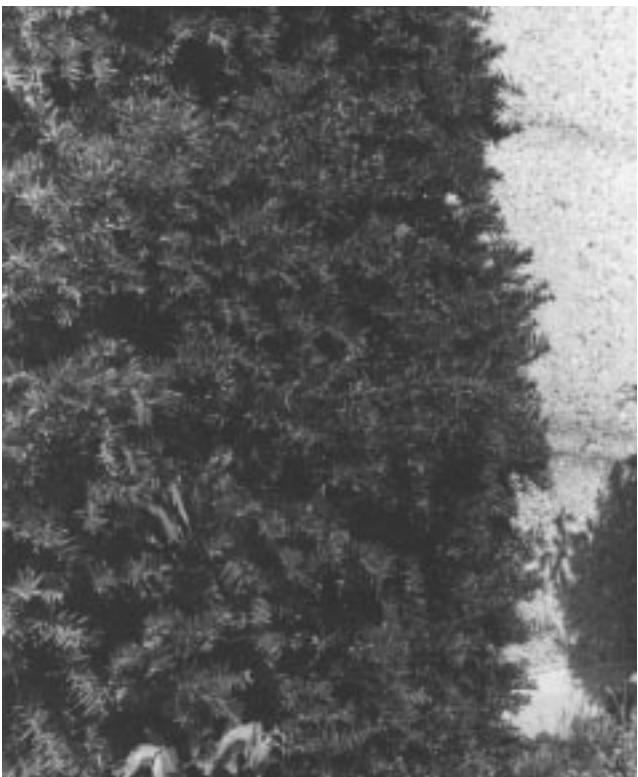
On **whorl-branching types of conifers**, you may choose to selectively prune back to another branch or bud. You can induce tip growth and branching by pinching back candles (the candle-like new stem growth which is produced in April and May) about halfway. *Never damage the central leader on whorl-branching types unless you have a very good reason.* If the leader is broken in some manner, you can vertically support and tie one of the next lower branches and try to train it as a new leader. Another alternative is to wait and allow new growth to take over and dominate in the vertical direction.



Replacing damaged central leader



Shape **random-branching conifers** by taking undesirable branches out altogether. If you wish to shorten only a branch, cut it to a bud or side branch. Make sure never to cut beyond the last green growth unless you plan to remove the entire branch.



**Figure 12.**—If an evergreen shrub has been pruned to a more formal shape, the new spring and summer growth should be cut back, preferably one branch at a time. By removing each excessively long branch individually, you can carefully cut to an existing side branch or an out-facing bud. **TOP:** During pruning. **BOTTOM:** After pruning.



**Figure 13.**—Yews typically produce abundant new shoots each spring. Many people shear these shrubs with an electric clipper in order to save time. The result is an unnatural appearance, injured branch tips and buds, and dense, clustered, dwarfed growth on the branch ends. This dense growth allows little or no light to reach the center of the plant; therefore, the center dies, leaving only a thin veneer of green on the outside of the plant.



**Figure 14.**—If you want to avoid the problems of shearing hedges mentioned above, make cuts similar to this technique. Clip each long shoot individually to a side branch as shown or to one of the outside facing buds (marked by arrow).



**Figure 15.**—This yew has been completely pruned, one branch at a time. Note that the uninjured healthy buds are the natural appearance of the plant.

## Pruning Equipment

Not only are the many types of pruning tools overwhelming to beginning home landscape managers, but the wide ranges in quality of tools are also puzzling. For most of you, however, this problem can be simplified: start out with your thumb and forefinger (the best tools for pinching back new growth), a hand pruning shear, a pruning saw, and a hand lopper. Additional needs will become evident as your landscaping and pruning interests expand.

Look for good quality and workmanship in tools, since they should last a lifetime. Choose the right tool for the right job. If a branch is larger than 1/2 inch in diameter, the hand pruning shear is no longer an appropriate tool. Use either a saw or lopper. Keep your tools sharp, clean, and rust-free for best performance.

**One-Hand Pruning Shears**—There are two basic designs of hand pruners. The anvil type cuts by the action of a straight blade against an anvil, and the scissors type cuts by the hook holding the branch while the blade slices through it.

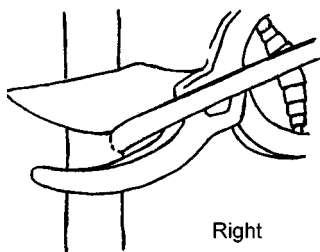
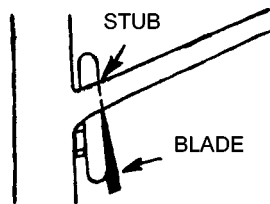
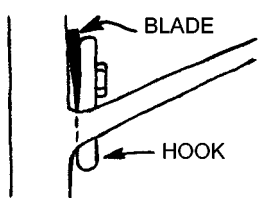
Whichever type you choose, don't buy poorly made models. They prove to be bad investments since they tend to make inferior cuts and need to be replaced within a short time.



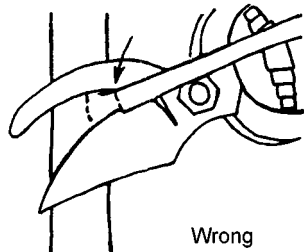
One-Hand Anvils



One-Hand Scissors



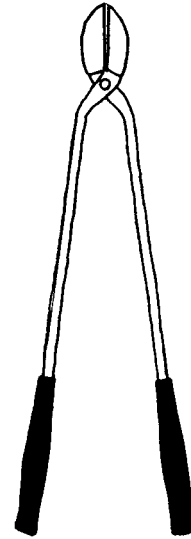
Right



Wrong

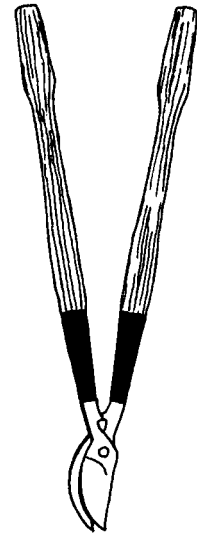
How to position pruning shears

**Two-Hand Pruners or Lopping Shears**—Long handles on lopping shears are the secret to their usefulness; they increase your reach and give you more cutting strength with added leverage. As with one-hand pruners, you have two styles to choose from: anvil and scissors type. Handles may be wooden, fiberglass, or tubular steel and may vary in length.



Anvil-type Lopping Shears

Scissors Lopping Shears



**Pruning Saw**—Branches thicker than one inch should be cut with a pruning saw. Pruning saws are different than carpenter's saws found in your garage. They are designed to cut on the pull stroke—and pulling is the most natural motion for cutting overhead branches. Pruning saws cut through green, fresh, wet wood very quickly if they are sharp.



Folding Saw



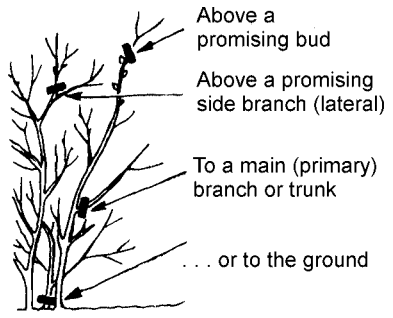
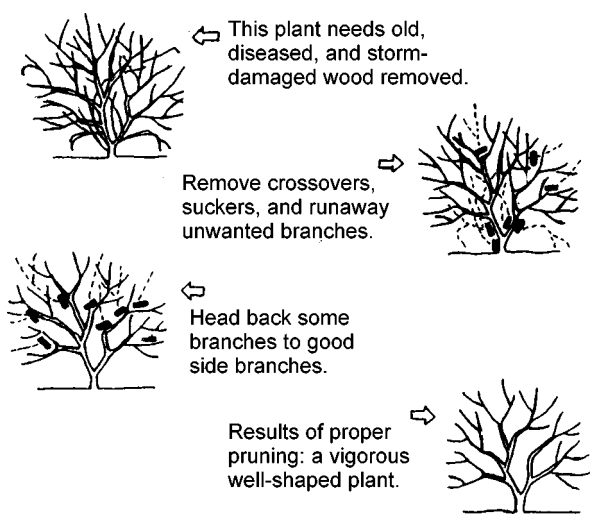
Grip Handle Folding Saw

## Basic Rules before Starting to Prune

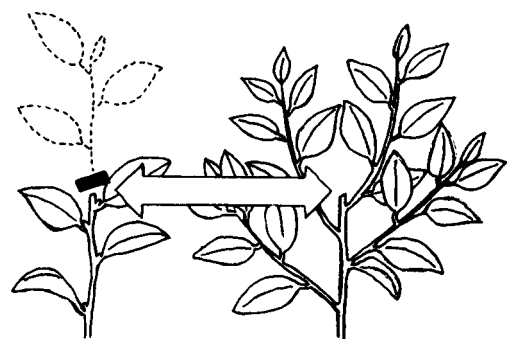
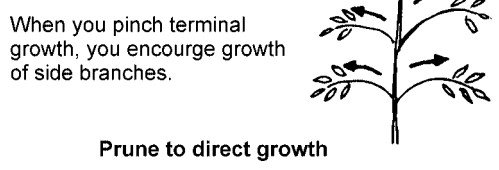
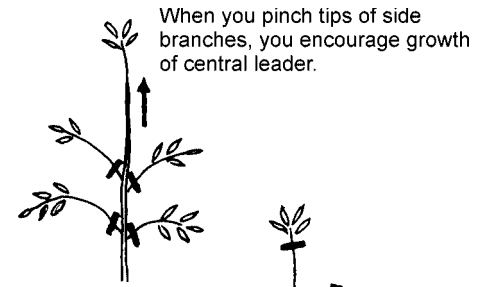
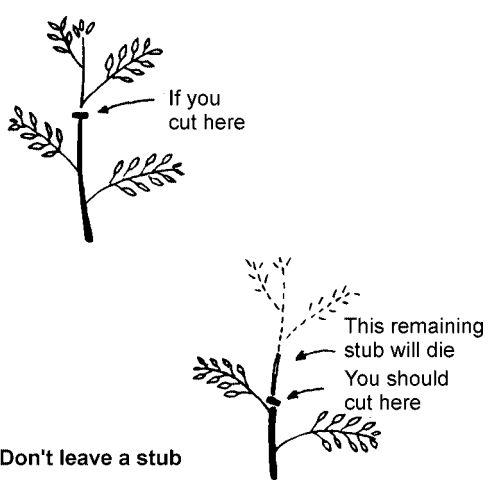
The following general guidelines apply to most plants in your garden:

1. Study your plant from all angles **before** you make any cuts.
2. The first order of business is to remove all dead, diseased, insect-ridden, storm-damaged, and winter-killed wood.
3. Once this is done, you can spot undesirable branches: crossovers, suckers, sprouts, branches that are too low or too long. These should be removed.

4. **Never leave stubs. All cuts should be made back to or just above some growing point, preferably to some outward growing point.** If you always prune to some growing point, you won't go too far wrong. New growth will continue to originate from cut areas.



**Where to make pruning cuts**



**Figure 16.**—Pinching of new growth is frequently done on conifers to make the branches fuller. A shears is used here instead of fingers, though either is appropriate. Notice that approximately one-half of the new candle is removed.

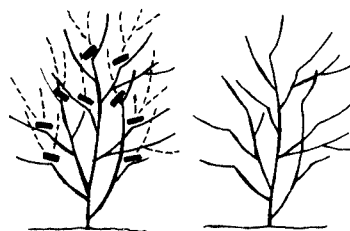
## Three Basic Cuts

**Pinching**—Pinching is usually done with your hands to remove stem tips of new growth. It is a good way of controlling plant size. If you pinch out the stem tip, most of its share of energy becomes available to other growing tips and buds. It often makes your plant appear fuller.



Pinching

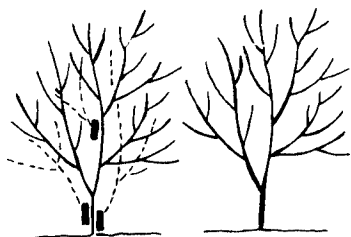
**Heading Back**—Heading back is shortening branches by cutting them to a good bud or lateral branch.



Heading back

On most plants you will use a combination of all three pruning techniques: pinching, thinning, and heading back. It's the surest way of shaping plants into attractive, healthy specimens.

**Thinning**—Thinning involves complete removal of entire branches back to a main branch, to the trunk or to the soil line.



Thinning