

PRUNING LANDSCAPE PLANTS

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(Below is a handout to accompany BJB's power point presentation on Pruning.) One topic that strikes fear in the hearts of many gardeners is pruning. When do I prune? What do I take out? How much is too much? What if I don't prune at all? These and other questions usually come up whenever a gardener takes up shears or saw.

REASONS TO PRUNE

Pruning is the selective removal of parts of a plant for one or more purposes. Reasons to prune include:

- ◆ To direct or control growth
- ◆ To compensate for transplant injury
- ◆ To alter, restore, or rejuvenate
- ◆ To offset and repair damage
- ◆ To encourage flower and fruit production and size
- ◆ To achieve a special effect or artificial form
- ◆ To promote plant health

WHAT TO PRUNE

- ◆ The *three D's*: dead, diseased, and damaged
- ◆ Watersprouts (vertical shoots from branches)
- ◆ Suckers (shoots from the base of a tree or shrub)
- ◆ Crossing or rubbing branches
- ◆ Long, awkward limbs
- ◆ Limbs with a narrow branch crotch or fork of less than 45°
- ◆ Dangling branches
- ◆ Insect-infested wood
- ◆ Spent flowers (before seed development takes place)
- ◆ Excess growth

WHEN TO PRUNE

The running joke is that the time to prune is when you have shears in your hand. However, the best time to prune is when it will achieve the desired effect with the least shock to the plant. For most plants, the ideal time is **late fall** after leaves drop and the plant is dormant or **late winter/early spring** just before new growth resumes. At this time foliage does not obstruct a clear view of the branches or limbs to be removed. Pruning just before plants break dormancy stimulates new growth. Pruning in late spring will control growth.

Plants can be pruned immediately after the flush of new growth in the spring to control growth. This is especially useful to keep hedges neat.

Do not prune most trees and shrubs between mid-July and mid-October. Pruning during that period may stimulate new growth that will not harden off before frost and will possibly winter burn.

Dead wood may be removed at any time.

Plants that bloom in summer and fall usually flower on the current season's new wood, so they are pruned in early spring before the onset of the new growth.

A rule-of-thumb for **spring-blooming plants**, which bloom on wood formed the previous year, is to prune immediately after flowering. Flower buds form in August and September for the next spring's bloom, so pruning after mid-July will remove or prevent these buds.

PLANTS THAT BLOOM ON THE PREVIOUS SEASON’S GROWTH:

Note: Look closely. *Buddleia alternifolia* is not *Buddleia davidii*, the common butterfly bush that blooms on current season’s growth.

Botanical Name	Common Name
<i>Amelanchier</i> sp.	Shadbush, serviceberry
<i>Aronia</i> sp.	Chokeberry
<i>Buddleia alternifolia</i>	Fountain butterfly bush
<i>Chionanthus</i> sp.	Fringe tree
<i>Cotoneaster</i> sp.	Cotoneaster
<i>Deutzia</i> sp.	Deutzia
<i>Enkianthus</i> sp.	Red-veined enkianthus
<i>Euonymus</i> sp.	Winged euonymus, burning bush, etc.
<i>Exochorda</i> sp.	Exochorda, pearlbush
<i>Forsythia</i> sp.	Forsythia
<i>Hydrangea macrophylla</i>	Bigleaf hydrangea
<i>Hydrangea quercifolia</i>	Oakleaf hydrangea
<i>Kerria</i> spp.	Kerria
<i>Kolkwitzia</i> sp.	Kolkwitzia, beautybush
<i>Lonicera</i> sp.	Honeysuckle
<i>Philadelphus</i> sp.	Mockorange
<i>Rhododendron</i> sp.	Rhododendron, azalea
<i>Spiraea thunbergi</i>	Thunberg spirea
<i>Spiraea x vanhouttei</i>	Vanhoutte spirea
<i>Syringa</i> sp.	Lilac
<i>Vaccinium</i> sp.	Blueberry
<i>Viburnum</i> sp.	Viburnum
<i>Weigela</i> sp.	Weigela

Broadleaf evergreens (azaleas, rhododendron, holly, mountain laurel, andromeda, boxwood, leucothoe) can be pruned hard to rejuvenate overgrown plants if it is done in late winter/early spring before the onset of new growth. If healthy to start, especially the root systems, these plants recover well from pruning into the plant beyond leafy tissue and send up new growth from dormant buds. Complete recovery should take about three years.

“**Candle**” evergreens (pines) are pruned in spring as their new growth (which resembles a candle) is elongating. Evergreens that have many terminals of new growth (hemlock, juniper, yew, arborvitae, and others) can be sheared at nearly any time. Do not prune back into the plant beyond the last green needles or scales. The exception is the yew that has dormant buds along the stems and can be pruned back beyond green needles to bare wood IF it is done in the early spring.

"**Bleeders**" are plants that drip sap when they are pruned in late winter/early spring. Some bleeders include maple, dogwood, birch, elm, and sour gum. The loss of sap will not affect the health or vigor of the tree.

PRUNING TECHNIQUES

There are several different pruning techniques. Each is used for a different reason.

HEADING BACK

This is pruning specifically to shorten branches. When pruning “cane” shrubs which send up many branches, or canes, from the ground (such as forsythia or spirea), heading back is used in combination with thinning to give the best results. Heading back is called "**hat-racking**" when limbs of larger trees are shortened without removing them to the next larger limb. This is a poor horticultural practice. New growth at this point is usually spindly and prone to breakage.

Heading back should be to a bud or group of buds so that no stub remains. When a stub is left that has no growth points or buds for new growth, any tissue beyond the buds will die and create an entry point for disease organisms.

Pinching: This heading back technique promotes the development of many branches. Removal of a terminal or end bud directs auxins (plant hormones) into lateral or side buds, and stimulates them to grow. This technique is used on chrysanthemums and other perennials and annuals to stimulate bushy growth.

Shearing: This heading back technique creates an even, shaped surface. Many or all rather than individual tips are removed at one time. Shearing is used to create special effects such as hedges, topiary, and pompons.

One of the basic reasons for most pruning, is to help make the plant look its best by making subtle changes in shape that enhance its appearance. Shearing is a technique for special effect. Avoid making "**nose cones**," "**meatballs**," "**oil cans**," and "**hockey pucks**" which ruin the natural shape of otherwise beautiful plants.

THINNING

Thinning is the removal of a stem at its point of origin in order to:

- Let light and air reach the plant center
- Eliminate competing stems
- Stimulate development of new growth from the point of origin
- Remove old, unproductive stems

DEADHEADING

This is the removal of spent flowers on rhododendron, marigold, daffodil, and other plants to direct plant energy into vegetative growth, rather than seed-production.

LARGE LIMB REMOVAL

Pruning tree limbs of hardwoods such as oak, apple, or maple is done in three steps. (Image missing) The limb is removed by first undercutting the branch (about a foot out from the trunk) to prevent bark tearing down the trunk. Next the majority of the branch is cut off (about two feet out from the trunk) to remove most of the weight before making the final neat cut. The last cut (from the trunk to beyond the branch collar) removes the limb from the trunk at the top of the cut out on an angle so as not to cut into the branch collar and to leave the smallest possible wound. For most trees, the old method of making a cut flush with the trunk has been proven to slow callusing and create too large a wound. If the limb is

inspected closely, most of the time it will “show” you by a swelling or narrowing of the limb where the cut should be made.

PRUNING FOR SPECIAL EFFECT

Pruning is sometimes used as an art form. Plants are directed to grow in a form other than that originally dictated by nature. Examples are:

Hedge shearing is used to create privacy screens and windbreaks.

Always prune a hedge so that the bottom of the hedge is wider than the top.

Never prune in a ball or in a “V” shape, or the top will eventually shade out the bottom.

Espalier is pruning a plant so that it has only two notable dimensions: width and height. Thickness is relatively minimal. Espalier is often used on a large expanse of plain wall or on a trellis.

Topiary is shearing of a plant to create a geometric form or an object, such as an animal. The shapes formed are often whimsical, such as a dinosaur, giraffe, and teddy bear.

Pleaching is interlacing the branches of trees planted in a row to create a high “hedge on stilts.”

Pollarding is heading back all new growth of a tree to the point of origin. The crown remains the same size each year. Branch stubs become greatly enlarged and gnarled.

PRUNING FOR PROFESSIONALS

Some jobs are best left to experienced, insured professionals. These include:

- Work high in large trees that requires use of a chain saw. This also includes any pruning that would require raising a chain saw above the pruner’s head.
- Major storm damage repair
- Large tree rejuvenation
- Stabilization of a weak or damaged tree
- Tree pruning on or within 10 feet of power lines

PRUNING EQUIPMENT

Telephone (to call a professional arborist or certified tree expert)

Good pruning reference book – or good internet information site

Clippers and scissors

Shears: hook and blade, bypass pruners, anvil pruners, lopping shears, hedge shears, ratchet pruners

Saws: pull-cut, push-cut, pole pruner, power or chain saw

Ladders, ropes

Safety equipment: gloves, hard-hat, goggles, ear protection