Pruning Deciduous Shrubs and Trees

Reasons for pruning:
- Safety – hazard limbs, sight lines, utilities
- Health – disease/infestation, air circulation, structural strength, rejuvenation
- Aesthetics – plant form, flowering, special shapes
- Size control – only temporary

Steps to successful pruning:
- For the first three years, limit pruning to dead, broken or diseased limbs.
- Prune dead, diseased or crossing branches anytime.
- Make all cuts at a bud or branch junction.
- Never top a tree, leave a stub or remove a branch collar with a flush cut to the trunk.
- To help prevent the spread of disease, sanitize pruning tools between cuts with a solution of bleach and water (10% bleach), bleach can discolor tools over time.
- Use the right tool for the job; keep tools sharp
- For mature trees (it is best to hire a professional):
  - Whenever possible, maintain the upper two-thirds of the tree branches and foliage.
  - Remove no more than 25% of the foliage in a season.

Timing of pruning:
- Winter – most common time to prune, best when trees/shrubs are dormant
- Spring – prune after flowers fade on spring blooming plants (avoid pruning elms and oaks until fall due spreading of disease)
- Summer – prune to slow growth; shape hedges
- Fall – wait until late fall when plant is dormant (prune bleeders now until early winter to lessen excessive bleeding: birch, maple, elm, walnut)

Pruning flowering plants:
- Non-showy – prune when dormant
- Early spring bloom – prune after bloom; flowers bloom on old wood
- Summer or fall bloom – prune when dormant; typically bloom on new wood

Spring bloomers include: Azalea, Forsythia, Lilac, Bigleaf and Oakleaf Hydrangeas, Redbud, Crabapples and Magnolias. Summer bloomers include: Rose of Sharon, Honeysuckle, Snowberry,

Making the cut:
- Cut ¼” above a bud (see next diagram)
- Make a 45° diagonal cut; angling away from bud
- The new twig will grow in direction the bud faces

Pruning Shrubs:
Shearing should be done only to formal hedges. This style of cutting leads to “witches brooms” on the ends of the branches and results in the loss of interior leaves and

Rejuvenation pruning is simply cutting all of the stems, of a multi-stemmed plant, back to the ground (as shown below), followed by root pruning to reduce root suckers. Late winter is the best time for this method. Shrubs that have been sheared may recover their natural shape by utilizing the rejuvenation pruning method. Rejuvenation is also recommended for old hedges that have become sparse, developed too many stems or become too large. Plants that respond well to rejuvenation include lilacs, dogwoods, privets, honeysuckles and forsythias.

Renewal pruning provides the same result over a three year period and can be done in the spring. Remove one third of the largest stems at ground level each year. As the new shoots develop, thin them to provide adequate space. Renewal pruning can be combined with heading back and should be followed by root pruning.

Correct Water runs off easily. Wound heals
Wrong direction Water will run onto bud
Too close to bud The bud may die
Too flat Holds water which can rot bud
Too much stub Die back occurs as wound doesn’t heal easily. Infection can occur
Too large a wound Infection enters wound easily

Correct Witches Broom
Wrong direction
Too flat
Too much stub
Too large a wound

Renewal

Cut roots: doesn’t grow back as vigorous
Prune here

Remove dark limbs at the ground

Natural shape after pruning
Heading back is the removal of old, or unwanted wood back to the main branches (shown below). The principle is that the limbs are cut back to well positioned stems so that the shrub maintains its natural shape. Cut back to buds or branches growing in the desired direction, remove unwanted branches, and open up the centers of the shrubs for increased sunlight and air penetration. This method can be combined with renewal pruning in multi-stemmed plants.

Shear hedges as seen below (narrowed at top).

Pruning Trees:

Tree pruning is best done while the tree is young. This helps to prevent damage and disease, invigorate growth, develop a strong structural framework and establish a pleasing form. Due to their cellular structure, some tree species produce wood that is inherently weak regardless of proper pruning (i.e. silver maples and eastern redbud). Some experts recommend pruning a tree seven times in the first 25 years to encouraging good structure. Refer to the previous diagram to determine the proper branches to remove.

When pruning of large trees is necessary it best done during dormancy in early winter. ‘Bleeding’ may occur in certain species, including birches, elm, maples if pruned in late winter or early spring. It is not necessarily detrimental to the tree, but may attract insects and lead to disease problems.

Care must be taken when cutting larger branches to prevent serious injury to the tree and tearing of the bark. Be sure to utilize the 3 step approach illustrated here:

Pruning a large tree is not an easy task, it takes proper chainsaw equipment and is dangerous. Extension highly recommends using a professional arborist.

For more information visit U of I Extension website or contact us:

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