

KEYS TO PRUNING EVERGREENS AND DECIDUOUS SHRUBS

Recommended tools, techniques, and timing for major evergreens

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Pruning of evergreen trees and shrubs is a management strategy that can effectively round out and enhance the year-round maintenance schedule. When considering timing for pruning of evergreen trees, it must be stressed that this process varies for the different genera and is dependent on the different type of pruning desired. Conifers, more specifically, pines, lack adventitious buds capable of generating suckers; therefore, removal of limbs and twigs, after they have taken on a woody or mature character results in a permanent loss of branches or foliage.

Top pruning of **pines** (shearing) is a specific practice accomplished in late June or early July when the new growth is in the candle stage prior to bud set. Unlike spruce and firs, pines form buds only once a year in the new candle (a meristematic area at the tips of branches); therefore, pruning for shape must be confined to current year's growth if the pine is to be dwarfed or shaped. Shearing the candle growth, a technique commonly used by pine Christmas tree growers, produces a thick-bushy tree. In practice, it is pruning off one-half of the candle during the elongation period, resulting in the formation of numerous buds for next year while reducing annual growth.

Pruning of **spruce and fir** is best done from late March through April to prevent dieback of stubs from freezing. Apical dominance is important when pruning spruce and fir and, therefore, one should prune just above a bud, similarly as

to how deciduous trees are pruned. Late May and June pruning is acceptable but not optimal.

If dwarfing is desired, spruce may be pruned back to two-year-old wood while fir can be pruned back to three-year-old wood if necessary. The death of terminal buds often requires a lateral branch to take its place. This is often done by bending up a lateral and tying in place for one season. When shortening the leader to reduce growth and height, it is often necessary to prune adjacent lateral branches below the new terminal to maintain apical dominance.

Limbing up of unwanted or dead lower limbs may be done at any time of the year for all three genera. This practice is commonly used in pine plantations to develop

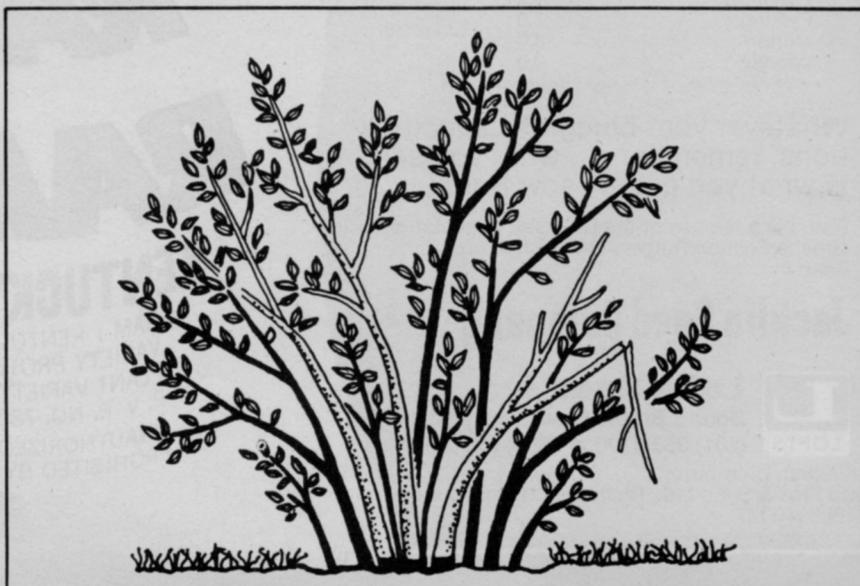
knot-free timber. Pines have resin or a natural fungicide that inhibits the activity of decay fungi in the wounds. This natural wound dressing not only protects the heartwood but seems to encourage callusing or closure of the wound.

Pruning of deciduous shrubs

The pruning of pines and shrubs is easy yet rarely done correctly. Deciduous shrubs, such as forsythia, lilac, Redosier Dogwood, and honeysuckle, should be pruned annually; therefore, **THEY REQUIRE A LOT OF MAINTENANCE.**

One should remove dead and diseased wood as well as 10-20% of the older branches at ground level. This encourages the shrub's natural habit of growth while effec-

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Older wood should be pruned to allow fuller and renewed growth.

tively reducing the height of the shrub. This height modification is accomplished by how much annual pruning is done, e.g. 15% removal - 8' lilac, 30% pruned - 5' lilac.

The removing of oldest branches is the best way to continually renew the shrub. As one removes older branches, a corresponding number of young shoots or suckers should be left. These shoots or suckers will help fill in the plant while helping to remove older canes that often have the highest insect infestation. Plants to be pruned in this manner would have foliage from the ground to the top, not just a few limbs in the upper area. A brief list of plants to be pruned annually in the spring just after flowering include:

Cornus stolonifera/C. *sericea* in Hortus III (Redosier Dogwood)

C. s. 'Flaviramea' (Yellow Twig Dogwood)

Deutzia (Deutzia)

Forsythia intermedia (Forsythia)

Hypericum prolificum (St. Johnswort)

Philadelphus (Mock-Orange)

Prunus triloba (Flowering Almond)

Spiraea (Spirea)

Syringa vulgaris (Lilac)

Weigela florida (Weigela)

Some flowering shrubs which form flowers on current season's growth should be pruned early in the spring as one would prune deciduous trees. These shrubs include:

Buddleia davidi (Butterfly-Bush)

Clethra alnifolia (Summersweet)

Hibiscus syriacus (Rose of Sharon)

Viburnum opulus (European Cranberrybush)

Rhododendron should be pruned either as a deciduous shrub to be renovated or remove half of the new growth just as elongation of this growth is complete to dwarf or contain the plant.

Many times new and old landscapes need to be renovated, that is, deciduous flowering shrubs (lilac, forsythia) have not been pruned often enough. This can be accomplished by cutting the entire plant back to 6" prior to commencement of growth in the spring. After the first season, the renewed shrub can be pruned as described above.



Candle growth can be pruned in half period results in numerous buds growth during the elongation and reduced annual.

Narrow-leaf evergreen shrubs, such as **yews** and **junipers**, fit the maintenance schedule well. They can be pruned during late June and July when the maintenance work load is slightly decreased. Either plant can be pruned into a formal hedge or informally to accent their habit of growth. It is important to remember though that yews should not be pruned after August 15 if winter injury is a problem in your locale.

Tools

Tool selection and proper use are important from the standpoint of minimizing injury to the plant while encouraging rapid callus formation. Four pruning tools provide the maximum flexibility needed to handle almost any pruning operation. These tools include: hand shears, lopping shears, hand saw, and pulling saw.

The most frequently used is a scissors-action hand pruning shears. This shears is desirable for removal of limbs and suckers up to 1/2" in diameter. The scissors action is superior to the anvil type because it cuts through the twig without crushing tissue. Making cuts of branches or limbs over 1/2" in diameter exceeds the design capacity, resulting in excessive damage to the shrub and pruning shears themselves while making the job tougher.

Lopping shears are useful for pruning branches up to 1/2" in diameter. The same principal for selection of head-type, that is, the

heavy cutting head consists of thick, bluntly beveled (parrot beak-like blades) and not the anvil type, is important. The length of the handle determines the leverage and, therefore, how easy the job can be done. When using either the hand or lopping shears, the position of the tool before cutting affects the quality of cut. Cuts where the blade is placed in the apex of the crotch usually result in splitting and bark tearing. The correct position of the scissors action tool places the blades perpendicular to the limb being removed. To facilitate the final "flush cut," the tool should be placed with the beveled side or the cutting side nearest the stem.

Limbs over 1" in diameter are best pruned with a pruning saw. The correct pruning saw is different from normal woodworking saws in two respects, the pruning saw has a curved blade and cuts (draw cut) only on the draw stroke, that is, the teeth are angled back towards the handle. Saws which cut on the pull stroke make the job easier. It is not recommended that one climb the trees or get the ladder unless absolutely necessary, thus poles make the job easy from the ground.

The handles for pole saws are made of fiberglass, aluminum, or wood. Although the fiberglass is heaviest, it is one of the safest materials near electrical wires. Of the wood types commonly used for handles, basswood, Sitka Spruce, and Western Hemlock are good with Sitka Spruce being best when considering light-weight and strength.

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