

Unique Garden Centre

PRUNING TIPS FOR TREES

There are essentially two objectives in the removal of parts of trees. The first is the cutting away of all dead and /or diseased branches or limbs. The second purpose for pruning is that of cutting out or clipping back living wood for either assorted environmental reasons (ex. too near building or power lines, to permit drivers a better view of oncoming traffic or for the purpose of training a tree to a desired form.)

The unsightly appearance of dead portions of a tree is in itself ample reason for pruning action. For the tree's safety it is important to remove dead wood thus eliminating unnecessary weight to the tree which may contribute to damage during a high wind. Also by pruning out the dead wood you eliminate an easy entrance for diseases and insects to living parts of the tree.

Pruning should be done in such a way that the natural form of the tree is followed or restored.



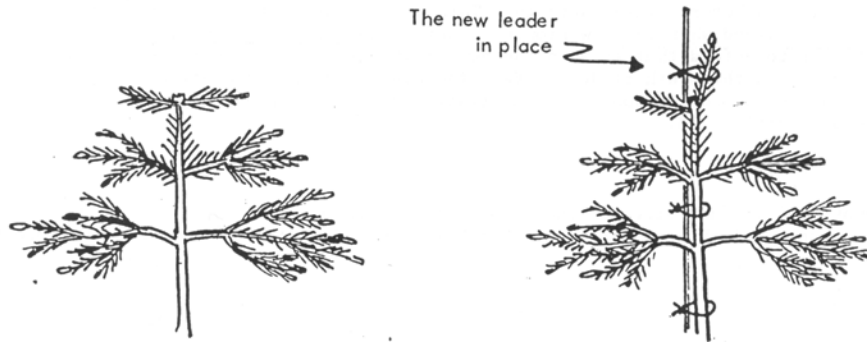
On a dead branch that has a collar of live wood, the final cut should be just beyond the outer edge of the collar.

Deciduous Trees

For the most part deciduous trees are pruned to have an open centre. This calls for the removal of branches which tend to grow inwards and those branches which are in contact with each other and subsequently rub and wear each other. This type of pruning allows the tree to grow to the outside and top where it will be exposed to the maximum amount of sunlight and moving air. Left un-pruned, air movement becomes restricted and the amount of light received may not be sufficient. The result, in time, will be the presence of central branches lacking in vigor and therefore susceptible to disease and insect attacks. In addition to removing inward growing branches, watersprouts and suckers should also be removed. Again, the object here is to create a form which emphasizes growth in outward and upward directions.

Evergreens

The discussion so far applies to deciduous trees. This is not to mean that evergreens do not require pruning. For the most part pruning pyramidal or central trunk trees will entail the removal of dead or overlapping branches. If noticed when the tree is relatively young, double leaders should be pruned out to leave one terminal leader to develop into the central trunk. Except where a terminal leader has been damaged by insects, disease or other environmental



forces it should not be pruned. If it must be removed for any of the previous mentioned reasons then a lateral branch should be trained upwards to replace it. (see diagram).

Pruning should be considered as a continual process rather than as the sporadic removal of limbs and branches both living and dead. Too much pruning at any one time upsets the balance established by the plant between its root system and its superstructures. This imbalance may become particularly critical if the tree, as the result of heavy pruning and subsequently reduced leaf area, is unable to produce sufficient carbohydrates via the photosynthetic process for normal growth. In addition to this, and in some cases as a result of this, new growth may not properly harden before the onset of winter making serious winter kill a possibility.

The most desirable pruning program is one that emphasizes light and frequent pruning. In this way you are more liable to keep “on top” of your tree problems and attend to them in their early stages with less disturbance to the tree than if you become concerned only after the damage has been done.

WHEN TO PRUNE

Most people do the majority of their pruning while the trees are dormant, especially in the period between mid February and mid May. During this time disease pathogens and insects are dormant. Although no leafing has started yet, this time period is when the tree or shrub is resuming activity. Cambium activity is greatest in the early part of the growing season. This allows the wound to heal relatively quickly before disease and insects are present. One cannot always determine what needs to be pruned in the spring when the tree is dormant, so after the tree is fully leafed out, check for any dead or damaged branches missed in spring and prune these out at this time.

Fall pruning should be discouraged, at this time the growth of plants is reduced, cambial growth ceases and pruning wounds would not heal during the winter months. Pruning at this time followed by severe winter weather may result in die back, so that further pruning is required in the spring.

There are, of course, certain exceptions which must be taken into account. Elm trees have a restricted pruning schedule due to Dutch Elm disease. The ban on pruning is effective from April 13th to July 31st. Those trees which bleed profusely, such as maples and birches, should only be pruned after June 15th, when in full leaf. The reason being that the foliage will utilize a great deal of the plant juices, thus reducing “bleeding” and promoting more rapid healing.

Spring flowering trees should be pruned immediately after flowering as most bloom on the previous year's growth. These include the flowering crabs, pear, hawthorn, lilacs etc.

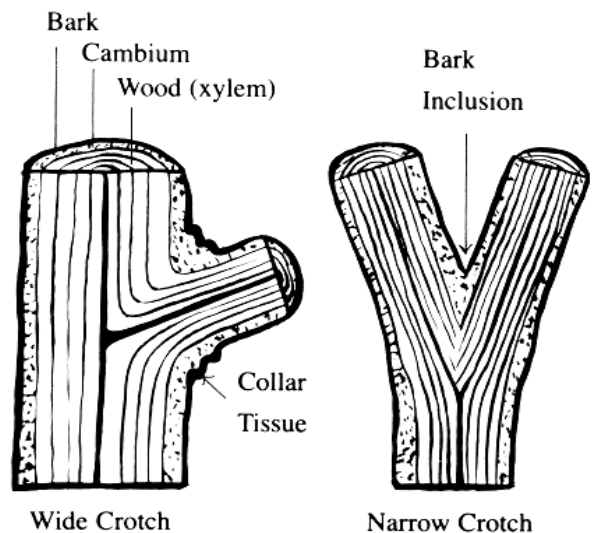
The pruning of evergreens should very definitely be done early in the growing season before new growth appears and restricted to the previous year's growth only (except where drastic cutting back is required). A second shearing or clipping back may be carried out no later than the middle of the summer, but there must be ample time for any new growth after this pruning to harden before winter sets in. This is the case with pines and spruce as best results are obtained when the new growth is soft. Most pines are best pruned before the needles start to unfold, that is when the new growth gives the appearance of candles. This usually occurs in the month of June. Very few evergreens produce new buds on wood over 2 years old, hence, the reason for concentrating your pruning activity on new growth or on the previous year's wood.

Refer to our "Pruning Evergreens" information sheet.

METHODS OF CUTTING

When removing limbs and branches one should attempt to make the final cut as flush as possible with the trunk or limb from which the branch is removed. Stubs should not be allowed to remain. The branch collar (a thickened, slightly raised area surrounding the base of the branch) must remain however. The reason being that the plant juices or sap flowing upwards now have no need to enter the stub (since there are no longer any leaves) in fact, by pass the stub. The cambium which is expected to continue growing in order to cover the wound does not have a food supply and it subsequently dies, leaving stub of dead tissue which only invites insects and diseases. By making the cut flush with the remaining part of the tree the cambium continues to receive a supply of sap and can continue to grow and cover the wound.

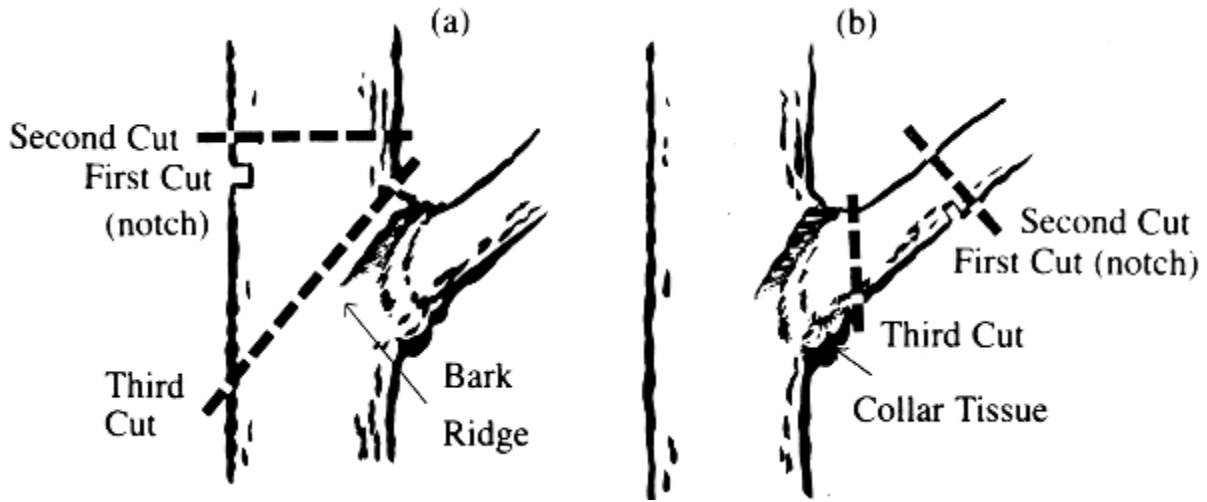
Where a branch to be removed joins another branch at a sharp angle (less than 45 deg.) follow the line of the remaining branch being careful to leave the branch collar. In this way, there is a minimum of exposed surface, and although a slight projection results, healing will take place satisfactorily. As the tree grows and expands, this projection will gradually be absorbed in the trunk or limb.



Wide crotches (left) are stronger than weak, narrow crotches (right).

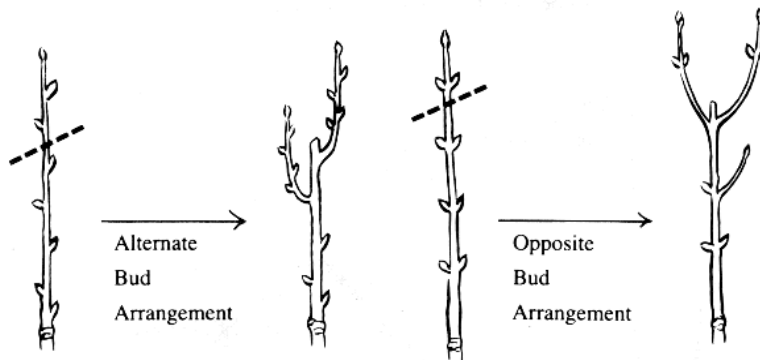
No large branches should be removed with a single cut, for the bark beneath the cut may be torn and the falling limb may also bruise lower portions of the tree. Three cuts are involved in the removal of such branches. The first cut should be on the underside of the branch a short distance from the trunk or limb to which it is attached. This cut should be made upward through $\frac{1}{2}$ to $\frac{1}{3}$

of the branch or until the saw binds. The second cut is to be made from the top down and is located 2 to 3" (5 to 7 ½ cm) further out on the branch from the first cut. In this way the weight of the branch will cause it to break free without tearing any bark and will fall or "jump" outwards. The third and final cut then is the "flush" or barking cut. See diagram



Types of thinning cuts: (a) drop crotching and (b) limb removal.

When cutting back twigs, care must be exercised so that the end bud is not injured. To cut too closely to the bud may damage it so that it dries out and dies, yet to leave too long a stub create the problem of stubs previously explained.



Pruning stimulates lateral shoot growth close to the cut.