







# **PRUNING APPLE TREES** **in eastern canada**

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# PRUNING APPLE TREES IN EASTERN CANADA

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An apple tree needs to be pruned for several purposes.

- To develop a mechanically strong trunk and strong crotches of the main lateral branches.
- To train the tree so that it will produce well-colored fruit of high quality and as high a marketable yield as possible.
- To shape the tree so that the crop will be uniformly distributed over the whole tree and will be easy to harvest.
- To train the tree so that spraying, and cultivating or mowing around it, can be easily done.

Pruning must start at planting time and continue throughout the life of the tree.

## WHEN TO PRUNE

Prune during the late winter or early spring, when the trees are dormant. If possible, prune just before growth starts in the spring. Pruning the dormant trees during the fall or early winter may lead to injury around the pruning wounds.

## HOW TO PRUNE

Pruning young trees dwarfs them somewhat because it removes buds that would produce leaves. Because the pruned branches are smaller than those not pruned, it is possible to regulate the dominance of certain branches.

It is much better to stimulate new growth by moderate pruning and applications of fertilizers than by severe pruning.

In actual practice today there are three main types of trees.

The *modified-leader* tree is a common type and it is preferred by many growers. A central leader is allowed to grow 6 to 8 feet high. By this time, the main scaffold limbs are well placed and a strong framework has developed. The central leader is then cut back, and the tree takes the form of an open-center tree. This type provides the combined advantages of the central-leader and the open-center types.

The *central-leader tree* is probably the strongest type. It has a main central leader growing to the full height of the tree, from which side branches radiate. The main disadvantages are that the lower parts of the tree become too shaded, and the tree is hard to spray.

The *open-center tree* is very weak because the main branches start from almost the same place on the trunk. The branches may split apart with age, and the tree may be a complete loss. Wind and heavy crops of fruit aggravate the splitting. It is best not to use this type of tree.

## PRUNING A YOUNG TREE

At planting time, head back a 1-year-old tree to a good strong bud at about the 3-foot level. This will cause a branch to form from the bud below the cut, and



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shoots to grow from the next two side buds. If you do not cut the whip back, the terminal bud will start to grow and the two side buds just below it may either remain dormant or form spurs.

When you plant a 2-year-old tree, choose the central shoot to form the leader. Select no more than four side branches as the main scaffold limbs. If they are not well spaced, two or three are enough. They should be in a spiral around the trunk, the first one starting approximately 30 inches from the ground. Be sure that they do not have very acute crotch angles. Choose branches that are at least 6 inches apart so that they will have plenty of room to grow. Remember that the centers of the branches are never farther apart than when they are first formed.ˆ

Tip the leader back slightly. Cut the side branches back to within 20 to 24 inches of the trunk to encourage them to branch. Head them back to outside buds so that the tree will spread out. More branches will grow out from the leader in the seasons to come.

When developing a modified-leader tree, head the leader back each season until it is 6 to 8 feet high and until enough side branches (six to eight) have developed to form a strong scaffold framework. From now on, there should be no dominant central leader. In this type of tree, the main limbs are never too crowded and weak crotches do not form.

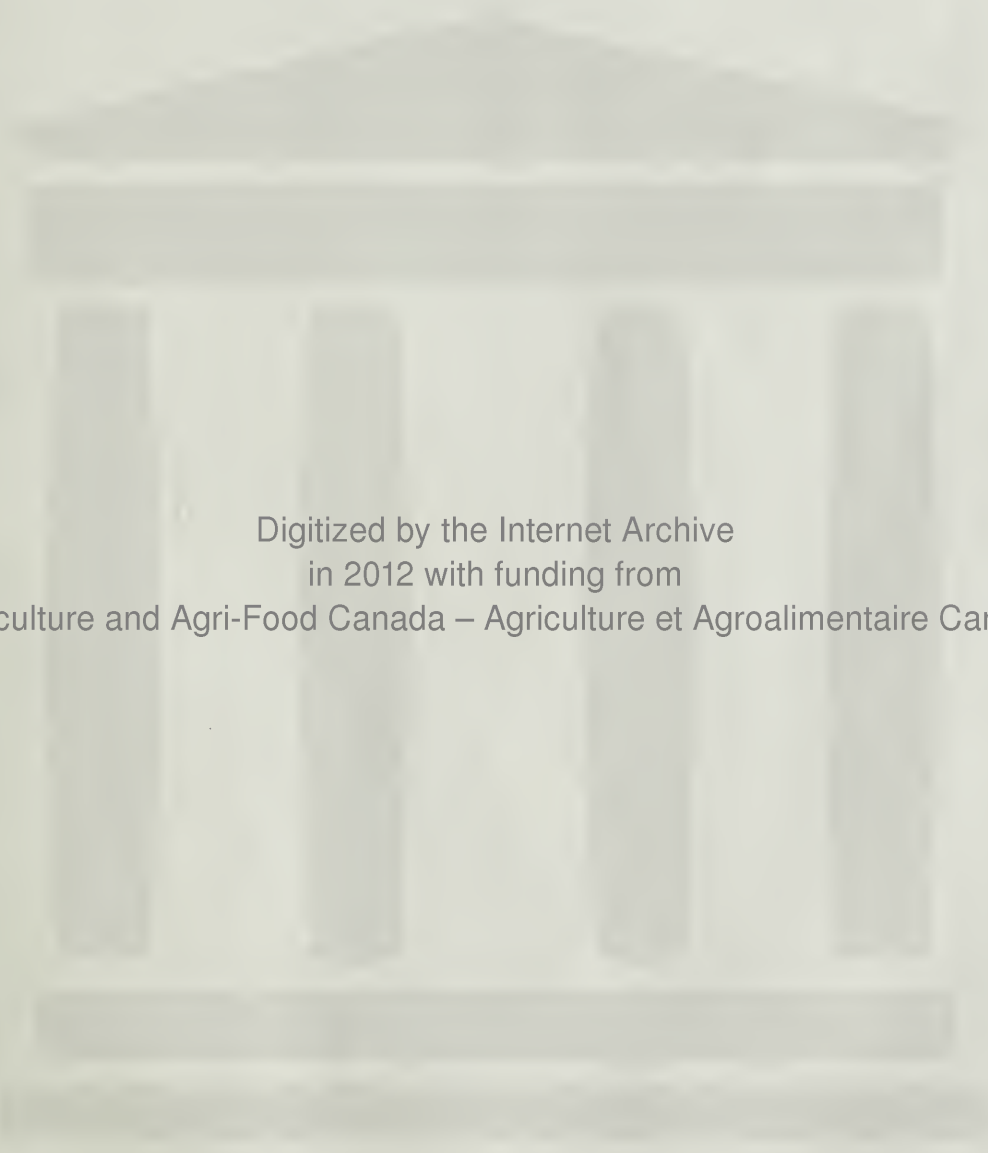
Always prune leading branches more lightly than competing ones. Remove crossing and crowding limbs. Where one branch is growing just over another, you should usually remove the weaker of the two. If the leader or main scaffold limbs are growing too fast, dwarf them by moderate pruning.

### **PRUNING A BEARING TREE**

After a tree begins to bear, prune it mainly to thin out small branches. Poor fruit develops on branches that are small in diameter. Proper thinning prevents crowding and shading. Keep the tree well balanced by occasionally heading back branches that are growing too strong. To be sure of well-colored fruit, keep the top open enough to let sunlight into the head of the tree.

The pruning wounds will heal quickly if you make the cuts clean and close to the limbs from which you remove the branches. Cover large cuts with tree wound dressing or emulsified asphalt.

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