

PRUNING AS A STRATEGY TO ENHANCE FRUIT YIELD

Amardeep Singh¹ & Trina Adhikary²

¹Department of Agriculture,
Khalsa College Amritsar, Punjab

²College of Horticulture & Forestry,
Punjab Agricultural University, Ludhiana, Punjab

INTRODUCTION

Pruning is the method of cutting or trimming specific sections of a tree or shrub that are dead or dying as a result of pests, disease, or lack of sunlight, or trimming for healthy plant growth and aesthetic purposes. Fruit trees need more pruning than other trees because you're making a shape that will help the trees bear high-quality fruit rather than just a pleasing shape. If left unpruned, the tree's dense upper foliage will shade the lower branches, preventing fruiting wood formation. Fruit development would eventually be restricted to the tips of high branches where sunlight is available. It can be difficult and dangerous to harvest the fruit from a tall tree, maybe 30 feet tall. Since the tree will be kept shorter and the sun will be able to penetrate to the lower fruiting branches, having a pruning programme will make it

easier to harvest the fruit. Pruning increases the likelihood of the tree remaining disease-free, produces larger fruit, and improves the structural support for growing fruit.

TYPES OF PRUNING

Winter and summer pruning, as well as green pruning, are the two forms of pruning. Summer pruning helps the fruit to ripen in the sun and guarantees a successful crop the next year. It only controls growth on trees with specific shapes, such as cordons, espaliers, fans, and pyramids. Winter pruning is essential for all other types of fruit trees and bushes. The best time to prune your fruit trees is when they are just starting to grow, during bud break.



PRUNING TOOLS

Pruning equipment must be sharp, sterilised before and after use, and appropriate for the length and bluntness of the branches. Secateurs or hand pruners may be used to prune both small (3 cm diameter) and large (3 cm width) branches. Broad branches can be cut with a handsaw (diameter more than 3 cm). Pruning the branches of tall trees can be done with pole pruners. Wide branches with a diameter of more than 3 cm are pruned with chainsaws.



PROCEDURE OF PRUNING

Pruning is one of the most important aspects of fruit tree maintenance, and if done incorrectly, it can do more damage than good. Farmers are also afraid of pruning because they believe they can prune too much or too little; however, pruning is not brain surgery. Farmers only need to follow a three-step method that works for the vast majority of fruit trees, whether they grow pome fruits (apples, pears, and quince), stone fruits (peaches, cherries, apricots, plums),

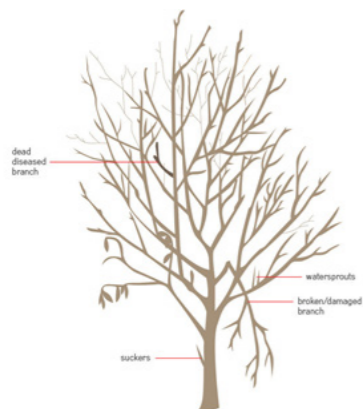
bushes (blueberries, cranberries, raspberries, and currants), or tropics (blueberries, cranberries, raspberries, and currants).

STEP 1: CLEAN UP

The first step in pruning is to remove dead, damaged, or diseased wood, as well as suckers (suckers raised from the base of the trunk) and water sprouts (erect, perfectly vertical branches).

Suckers and water sprouts are two examples of quick new growth that depletes plant and tree resources. Any growth that occurs below the graft union or from the roots/below the ground should be removed as soon as possible. The same is true for fast-growing vertical shoots that emerge from the trunk/branches later in the life of your tree as it matures. Allowing suckers and water sprouts to grow on your fruit tree will deplete the vegetative and fruiting wood that you want to grow strong and healthy.

When pruning young tree plants, you can extract all fruit buds in the first and/or second years so that the bush can focus its energy on growing.



It's critical to prune the branches back flush to the larger limb they're emerging from with all of these clean-up cuts — don't leave little stubs.

STEP 2: THIN OUT

Thinning increases fruit production and reduces pest and disease problems by allowing light and air into the canopy. Remove any branches that expand downward, toward the tree's base, or cross paths with another branch first. From the base, uniformly spaced branches should splay out in a pleasing, fractal-like pattern.

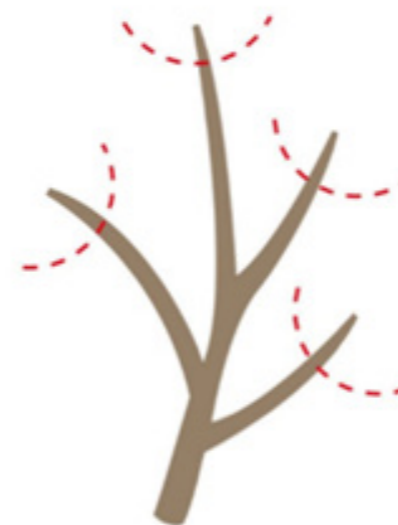
If several branches are competing for room, remove all but one, keeping the branch with the healthiest appearance and best crotch angle (roughly 2 or 10 o'clock from the tree's centre). When laden with fruit, wider angles will split, while narrower angles result in bushy growth and fruit that is too big to select.



STEP 3: HEAD BACK

In the final stage, you'll give the tree a trim. The tree's outermost growth should be pruned back so that the branches grow shorter and thicker rather than long and gangly. This prevents them from snapping under the weight of the fruit, resulting in the loss of 20-30% of last year's growth.

Remove all pruned wood from the orchard and kill or burn it after pruning, particularly if it contains diseased material.



CONCLUSION

Pruning is an important part of fruit tree maintenance, but if you don't do it correctly, you can end up hurting your tree rather than helping it. If you don't know how to prune a neglected fruit tree, the wood will become brittle, and breakage and splitting will occur. A good, well-cared-for tree encourages growth and the production of fresh fruit after pruning. Deadwood that has been left to rot or that has not been properly removed is much more likely to become infested with insects or diseases. Pruning encourages the growth of new buds and fruit by removing dead or damaged sections of the tree.



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