

How To Grow

Tree Care Tips from Certified Arborist Aaron Wurts

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Fruit Tree Pruning

With spring just around the corner, thoughts turn to fruit tree pruning. Here on the Wet Coast, we usually prune fruit trees in the late winter or early spring. At this time, trees are still dormant and the risk of spreading fungal disease lessens with the drier, sunnier weather. It is important to prune before bud break but after the worst of the winter weather has passed.

Some guiding principles should be followed to maintain health and structure of large growing fruit trees.

1. Make proper pruning cuts.
2. Remove no more than 25-30% of the tree's canopy each year.
3. Keep a low and spreading structure for ease of picking fruit.
4. Keep the centre open to maintain light penetration.

5. Maintain the vigorous sprouts and remove the weak.

Pruning for Fruit Production

By reducing and thinning out last year's growth and spur networks, structure and light penetration is encouraged. The tree's energy is sent to the remaining canopy and the end result is larger, nicely spaced fruit.

Renovation Prune

If a previously pruned tree has been left for many years, a renovation may be required. This involves making larger cuts with the objectives of reducing the height and opening up the remaining structure to improve fruit accessibility and light penetration. Depending on the tree, this can take a few years to complete. Once the desired structure has been obtained, pruning for fruit becomes the main objective.

Healthy Roots & Soil

Trees in the urban environment are often found in less than ideal growing conditions which may include:

- compacted, oxygen-poor soils
- soils lacking in organic material
- minimal space or soil (trees surrounded by parking lots/pavement on all sides)
- lack of proper irrigation/change to drainage during nearby construction.

These obstacles and stressors can inhibit growth, leave the tree susceptible to pest and disease, and cause the decline of valuable specimen trees. Continual leaf pickup, lack of soil amendments and heavy rainfall also leave soils lacking the appropriate nutrients required for proper tree growth.

Proper installation of new trees, improving soil by amending, and assuring adequate irrigation can minimize stress to trees.

Another effective and valuable means of improving the health of your trees and shrubs is with a soil injection system. This high-pressure system injects a water soluble or suspended slow release fertilizer six-to-eight inches into the soil surface. The system aerates and waters at the same time and additional products can be added to improve soil conditions.

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Case Study: Improper pruning and spurred tree work

Scenario:

Large big leaf maple tree located very close to a house and spreading over the deck. Three years ago, the tree was aggressively pruned back off the house and deck. Approximately 40% of the canopy was removed and spurs were worn to access the tree.

Outcome:

- Excessive water sprouts are produced at large cuts and overall form has been destroyed.
- The infection of a decay pathogen (that entered through the spur wound) weakened a stem which then failed and damaged the glass railing around the deck.



Notice the concentration of decay at the failure point which is also the location of a spur wound.

Discussion:

Damage was caused by the method of pruning. An improper pruning cut can compromise the tree's ability within the branch socket to stop the spread of decay pathogens.

More than 25% of canopy loss has potential to stress the tree.

Excessive removal of one portion of a tree's canopy can:

- increase the chance of sun scald (especially a south facing portion of the canopy) and leaves the remaining canopy compromised
- expose large branches and limbs that were once protected to new windthrow causing increased potential of failure.



Orange arrows indicate spur wounds. Notice the proximity of the failure point to the uppermost spur wound.

Spurs can significantly damage the tree, opening up the cambium to infection and decay. When climbing on spurs, every step creates a puncture wound that has the potential for fungal or bacterial infection. Fungus and bacteria can penetrate the trees' natural defences and cause premature failures. **Spurs should only be used on trees slated for removal.**

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Comox Valley Certified Arborist

GROW Tree Care is an independent, locally-owned tree company. Operating in the Comox Valley since April 2009, GROW specializes in pruning, health and maintenance of trees and shrubs.

Owner/operator Aaron Wurts is an ISA certified arborist, tree worker/climber specialist and hazard tree assessor. Aaron has a passion for spurless climbing and approaches all pruning with a genuine concern for the health and longevity of the tree.

Healthy Roots and Soil continued...

When To Use Soil Injection

Trees that are stressed:

- before or after construction
- poor site conditions
- trees showing signs of pests and/or disease.

Hedging - to encourage dense growth or prior to hard pruning

to encourage new growth and minimize stress.

Trees and shrubs with minimal soil like those in planters found around condos or in formed landscapes.

Soil injection should be used in conjunction with other plant health care practices (like applying mulch or compost) for optimal results.



GROW tree care

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Tree Care For People Who Care About Trees