ORGANIC FRUIT TREE MAINTENANCE
APPLES, PEARS, PEACHES, PLUMS, CHERRIES

- Choosing the right cultivars
- Right Plant Right Place
- Planting
- Pruning
- Fertilizing
- Pollination
- Diseases
- Insects
- Animals

CHOOSING THE RIGHT CULTIVAR

There are a huge number of varieties that will grow here on the southern Vancouver Island, but there are only a few that are especially recommended. By choosing a disease resistant or highly adapted variety, we can prevent the problem before it begins, (a very important organic principle)

Disease Resistant Varieties

**Apples** (resistant to scab and mildew)
Yellow Transparent, Redfree, Prima, Liberty, Jonafree, Priscilla, Bramley’s Seedling Wolf River.

More apple varieties not necessarily disease resistant, but excellent and proven varieties for this area
Akane, Discovery, Gravenstein, Chehalis.

**Peaches**
Frost - leaf curl resistant

**Other good ones**
Early Red Haven and Harken

**Pears**
Bartlett, Orcas, Comice and Bosc
Avoid Kieffer, D’Anjou, Winter Nelis

**Plums**
Seneca, and Italian Prune Plums

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Sweet Cherries
Early Burlatt, Compact Stella, Hardy Giant, Lapins

RIGHT PLANT, RIGHT PLACE

The two most important factors to be considered when growing a healthy fruit tree are drainage and exposure to sunlight. In terms of drainage, sandy loam is the ideal growing medium. If you don’t already have this soil, amend it (as described later), and plant a tree on a berm. As for light, full sun all day long is ideal, but 11am to 5 or 6pm is crucial.

Special notes on particular fruit trees

- Peaches, Apricots, and nectarines must be planted on a south wall under an overhang, to prevent the diseases to which they are most susceptible.

- All of the genus prunus (cherries, peaches, plums) detest wet feet.

- All fruit trees on dwarfing rootstock (M9 or M27) must be supported with stakes throughout their lives.

PLANTING

If you have clay

- Dig a hole two feet deep and three feet wide. Move the clay out and replace it with one half finished compost and one half fine fir and hemlock bark mulch. Also, add a scoop of complete organic fertilizer, including lime, and mix in well.

If you have sandy loam or silty loam

- Do as above; only mix the pre-existing soil with one half to one third finished compost.

Plus…

- If the tree needs staking, the stake must be placed two feet into the ground.
- The fall is the best time to plant fruit trees, though you can do it in the spring too.
- If the soil is dry, water it thoroughly before and after planting.
- Maintain the two-foot wide area around the tree free of competing vegetation.
- Mulch this area with finished compost or fine fir or hemlock bark mulch. Replenish this mulch every year, but never cover the graft point on the tree.

PRUNING

- Get a good quality pair of pruning shears (i.e. Felco #2) and a folding pruning saw. Never use pole pruners – use ladders instead.

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- Disinfect your pruning tools with rubbing alcohol (a spray bottle is a convenient way to do it)

- Decide what shape you would like your fruit tree to have; central leader, open centre, slender spindle, oblique cordon, espalier, Belgian fence, palmette verrier, etc.

- Remove the 3 D’s – damaged, diseased, and dead wood.

- Never cut into the branch collar.

- Also prune to allow maximum light and airflow into the centre of the tree (When in doubt, thin out)

- Make heading cuts (cuts that also encourage outward growth) at an outward facing lateral bud and remove any buds close to there that are pointing inward. Avoid heading cuts on plums because they sucker so badly.

- Summer pruning reduces growth, and winter pruning encourages growth.

- When removing large limbs, always use the three-cut method.

- The hormone that produces fruiting buds in fruit trees functions ideally when the limb is at a 20 to 40 degree angle from the trunk of the tree. Small bags filled with sand can be hung to help spread the limb open. You can also use pieces of wood in the crotches of the tree.

**FERTILIZER**

- Trees have evolved through time to not require a lot of food. The most important factors for healthy fruit trees are a sufficient supply of micronutrients, and Calcium and Magnesium, (kelp meal and greensand are excellent sources).

- Providing young trees with an adequate supply of nitrogen for the first through fourth year is also important to maintain good growth. Appling liquid fish, twice in the spring (early and late), will suffice.

- Once trees are established, do not feed nitrogen as this can lead to too much lush green growth, which makes the trees susceptible to disease and insects.

- Compost teas are an excellent way to provide essential nutrients, as well as the necessary biota to build healthy soils. Recent studies at the University of Oregon have proven that compost teas, when foliar applied, provide an excellent way of not only preventing disease, but also, curing it when it has struck. Here is their recipe: Fill a 5 gallon bucket with half way with finished compost, one tablespoon
of organic unsulphured molasses, top the bucket off with un-chlorinated water (not too full, to allow for foaming, and it will foam!), Attach an aquarium or pond bubbler, and allow to aerate for two or three days, pour through a sieve and use it either at full strength or dilute up to 50% with water, best if used as a foliar feed.

**POLLINATION**

- To get high yields from your apple, pear, Japanese plum, and some sweet cherry trees you will need to grow at least two compatible cultivars for cross-pollination.

- The Blue Orchard Bee will also help considerably with pollination of your fruit trees. The design of the ‘Beediverse’ condo is superior for ease of cleaning in winter, and size of the hole.

- There are three different times of pollination: Early Season, Mid-Season and Late season, make sure the blossom time of your trees coincides for good pollination.

- Triploid varieties have sterile pollen; therefore they need two compatible varieties to ensure good pollination. Some triploid varieties include: Gravenstein, Red Gravenstein, Mutsu, Belle de Boskoop, Jonagold, King of Tomkins County, and Bramley’s Seedling.

- Crab apples make excellent pollinators, because of there long bloom time.

**DISEASES**

- Diseases in trees are caused by stress, just like people, if you can identify what is causing the stress and alleviate that, then the tree’s own defences will bring an end to the disease, in most cases.

- Scab overwinters in the fallen leaves of your fruit trees so, always rake up your fallen leaves.

- The IPM triangle of host, environment, and parasite, is a very important principle to alleviate problems once they strike. By removing, or changing, one of the three factors you will eliminate the problem.

- Our moist, mild, coastal climate provides an ideal environment for many of the fungal diseases that afflict fruit trees, therefore, spraying sulphur in the winter and early spring, will help to maintain healthy disease free trees.

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- Cherries, peaches, apricots and some plums are very susceptible to disease and should not be planted unless the ideal growing conditions can be provided.
- Avoid planting new trees near old and infected trees.
- To avoid pear trellis rust, remove host junipers.

- **INSECTS**

- “When we kill off the natural enemies of the pest, we inherit their work.” Carl Huffaker

- By creating a lush, diverse ecosystem in our backyard, we allow nature to look after any of the potential pest outbreaks.

- Plant flowers to attract predator insects. Alyssum, Agastashe, Ceanothus, Cosmos, Eryingeum, Lavender, Marigolds, Phacelia, Salvia, Sedum, Thymus, Verbena, and Yarrow, are all examples.

- Codling moth is probably the biggest pest for apple and pear growers, here are some organic solutions:
  - Chickens in your backyard will greatly reduce the incidence of codling moth
  - Promptly destroy any wormy fruit as it appears, by solarizing in a clear plastic garbage bag, then compost them.
  - Wrap the lower portion of the trunk with a piece of corrugated cardboard, as the females like to lay their eggs there.
  - In early spring scrape loose bark to remove any overwintering cocoons.
  - A new product called ‘Surround’ has been licensed for use in the U.S.A., test have been very successful at deterring up to 90% of codling moth, as well as many other fruit tree pests. The product contains kaolin clay and covers the tree in a dusting of white clay, to deter and confuse the pests.
  - Pheromone traps have proven to be very successful for the organic orchard industry here in B.C., but reports have been mixed for the backyard, as a large area needs to be covered, to prove effective.

- **ANIMALS**

- Deer, racoons, birds, cats, squirrels, rabbits, humans, can all have a drastic effect on our fruit trees.
- Fences, nets and whatever else can construct or conceive, to prevent the creatures from getting near the fruit is your only defence

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