PLANTING FRUIT AND PERENNIAL CROPS

The idea of planting some form of fruiting tree appeals to everybody [or at least the vision of plucking ripe fruits from a tree you've planted yourself]. Whilst wishing to encourage more fruit-planting wherever possible, care must be taken to ensure a successful result. What follows is an attempt to comprehensively describe all the actions necessary to increase the plant's chances of attaining a productive, healthy and long life. This information is compiled from many sources and suggestions, over many years of practical experience.

Purchase **OPEN or FIELD-GROWN** stock, which will have a natural root-form, in the DORMANT season, rather than POT OR CONTAINER-GROWN, which are more likely to have ingrown and restricted roots and may have spent too long in too small a pot. If you can only obtain potted stock, ensure that the ROOTBALL is thoroughly disentangled when the plant is transplanted or potted up.

YOUNGER plants [1-3 years] will probably become re-established in their final positions more quickly than older [3-5 year old]. Nursery growing conditions will have been as close to perfect as possible, to ensure maximum growth in the stock offered for sale. Care should be taken to try to ensure that these high levels of fertility are maintained during the first 5-7 years while the tree is becoming established in its final position. Unimproved soil will check tree's growth in its formative years, postponing its full establishment and cropping.

SOIL IMPROVEMENT should aim to allow the plant to fulfill its prodigious growth potential, first by remedial, mechanical addition of enough bulky organic matter to render a sufficient area and depth of soil readily penetrable by the plant's roots and secondly by the addition of sufficient concentrated long-term, slow-release fertilisers to allow the tree to generate a sturdy and balanced structure of healthy wood which will be capable of bearing the weight of many years' fruit crop. Imagine that each tree may produce hundreds of pounds of fruit annually when it is mature. The future return justifies a generous investment to help guarantee that outcome. Spend at least the value of the plant on feeding its formative growth with bulky organic matter and concentrated fertilisers. Once fully established, the plant will be capable of exploiting all the indigenous, unimproved soil available to it.

SPACING. The size of the mature tree is dependant on the vigour of the rootstock which the fruiting wood has been grafted onto. The full extent of growth of various rootstocks vertically and laterally are as follows; dwarf 5-10 ft, bush/semi-dwarf 10-15 ft, half-standard 15-20 ft, full standard 25 ft

AFTERCARE. The purpose of following the complete instructions for planting is so that the tree can be provided with all the conditions needed to succeed with as little ongoing intervention as possible. Problems later in the life of perennial fruiting crops can most often be directly attributed to insufficient soil preparation and care when planting.

WATERING. Copious amounts of organic matter in the vicinity of the young plant's roots will help to guarantee that it does not die even during prolonged drought. However, an extended period of dry weather during the tree's first period of growth in its new situation, during the hot, long days of late spring and summer [May to August], could severely restrict growth and delay the young plant's establishment until the following year. If drought lasts for more than four weeks during this period,
water thoroughly [50-100 L] and repeat every fortnight.

MULCHING AND WEEDING. In the first few years of a tree's life, its root system will extend outwards in the soil at the rate of about 15cm/6 inches in each direction each year. Care should be taken to ensure that weeds do not out-compete the tree's roots for moisture and nutrients over the whole rooting area especially at the drip-line, which corresponds to the outer edge of the rooting circle, where most of the tree's fibrous feeder roots are concentrated. Young plants should only be mulched with permeable materials which will readily allow rainwater to penetrate straight through to the roots.

PRUNING. During the first 5 years of the tree's life, it is possible to form the skeleton or superstructure which could bear the weight of crops for many decades into the future. Careful attention to the removal of any small pieces of dead, diseased and damaged wood will help to reduce the chances of minor ailments developing into major problems. Try to read the present shape and habit of the tree and allow its natural form to be expressed. Assess its current shape first in the three dimensions of space and then project this forwards in time to what it will develop into in one, five and ten years. Try to reduce the tree's vigorous, leaf and branch, structural growth by shortening extension growth to allow fruiting on mature wood which is strong enough to bear the weight of fruit. Plums and cherries should only be pruned during April to July, when the sap is flowing strongly enough to heal wounds quickly.

FRUIT / PERENNIAL CROPS - PLANTING SEQUENCE (refer to diagram)

1. Dig hole 3-4 ft [1m+] wide & 12-18 inches [30-40cm] deep. Put topsoil into a mound on one side.

2. Break up the subsoil in the bottom of the hole with a fork to ensure good drainage under where the roots will grow and remove any large stones or obstacles to root growth.

3. Fill half the hole with rough organic matter and fertilisers that will take 3-5 years to break down. Using a fork, first mix with some subsoil and then a couple of spadefulls of topsoil.

4. Overfill the rest of the hole with more mature organic matter and short-term, soluble fertilisers [such as aged compost and seaweed]. Stir the mix with a fork again bringing up a small proportion of the rougher lower half. Add more topsoil until there is 50% soil in the mix.
This completes the radical preparation of the soil to ensure the plant thrives in its first few years and forms a strong and healthy structure. This operation can be carried out during the longer days and better weather earlier in the year [September-November], allowing the additives to settle and be consolidated, and permitting much quicker planting if required during the dormant season [Dec-Feb].

5. Dig a hole into the mixture 18 "/40cm wide and deep, larger if roots are up to a foot [30 cm] long.
6. Form a mound of improved soil at the bottom of the hole.
7. Spread out the roots in a circle in all directions and place it gently onto the mound.
8. Check that the graft point is 2"[5cm] above ground level to stop the fruiting stock from rooting and if possible that the graft wound faces towards the sun [south] so that it stays dry and heals over.

9. Place the stake between the roots so that it meets the tree without disrupting its branches and supports it vertically. Holding the tree away, push the stake into the subsoil and drive it in a further 6-8"/15-20cm with a lump-hammer. Check that the tree and stake are still positioned correctly and adjust either as necessary. Except in especially exposed, windy sites or on light soils, using extremely dwarf rootstock, a stake that protrudes 12"/30cm above soil level will be sufficient to protect the tree, without making it dependant on support.

10. Tie the tree and stake together loosely at the point where they touch making a figure of eight between the two, using strips of rubber [1x12"/3x30cm] or other soft, elastic, non-synthetic materials.

11. Tease out the lowest main roots from the root-ball and spread them radially to cover as much area available as possible. Remove any broken roots. Settle the main and/or fibrous roots into the mix pointing outwards and hold them in place with improved soil mix. Firm down gently with the knuckles or palms of your hands. Aim to guarantee maximum contact between the roots and soil so that the plant can draw on the greatest area possible as soon as it starts to grow in the spring.

12. Identify and separate roots growing further up the taproot and attempt to create a second circle of roots 2"/5cm above the first. Vigorous rootstocks may have enough growth to permit a third circular tier or level of roots to be arranged.

13. Cover the highest roots with 4"/10cm soil mix and press firmly with your fists. Firm pressure minimises the danger of leaving an air or water pocket near the roots which could damage them or even make the tree unstable. The further away from the plant's stem, the harder the pressure can be, since the mix acts as a buffer protecting the roots from damage.

14. Loosen and stretch and tie the rubber so that the stake is firmly supporting the tree.

15. Spade another 6"/15cm of mix and topsoil around the tree and tread down to form a slight mound all around. With your toe pointing towards the trunk, stamp the ground down with your full weight, so that your heels create a circle of well-compressed soil 12"/30cm radius around the tree.

16. Fork over a circle of topsoil outside the compressed soil to bring the whole area back to level.
17. A second, less substantial stake [such as a simple bamboo cane tied with soft string] can be used to supplement the ground-anchor stake whenever a plant is especially tall or on an especially windy site. On well-protected sites, the anchor-stake can be omitted and the cane used for first year only.