

Understanding your fruit tree



Trees are complex plants whose growth is affected by many factors, such as temperature, rainfall, humidity, fertilizers, pruning, pest and diseases and damage.

Trees respond to all these factors, for instance in warm sunny weather in the spring, the trees will break dormancy and start to open its leaf buds.

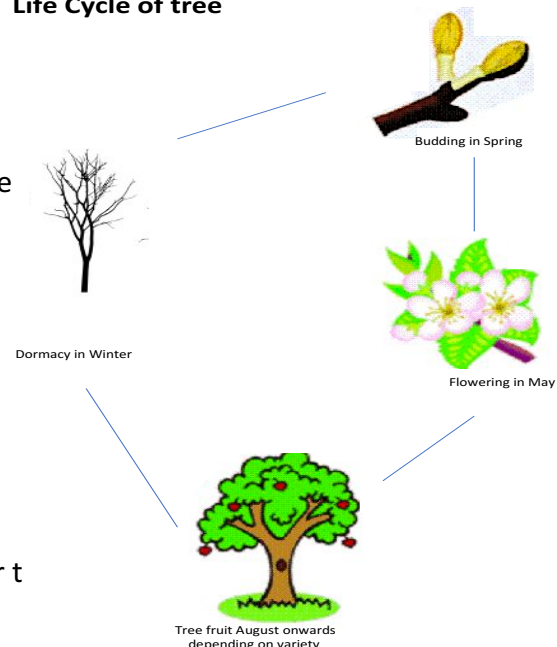
Trees also respond to damage. By destroying leaf surface, it reduces the available surface area for photosynthesis to take place, which in itself, will mean less growth. The tree can be left weak and open to attack by pest and diseases, if it suffers damage. The damage can include environmental conditions, too little rain or too cold all affect the tree. Damage to leaves, roots, branches or bark and physical damage such as excessive pruning, over fertilisation can all affect the tree and make it less productive.

The damage can affect the tree not only for this fruiting season but the next fruiting season as well. This will lead to the leaves reducing their ability to photosynthesis, and therefore affect the carbohydrate supply which the tree needs to develop. Not enough carbohydrates stored this year will not give the tree the start it needs to come out of dormancy the following spring.

Life cycle

Each tree has an annual life cycle where it grows but is dependant, on a number of factors as detailed above. However temperature is the most important as this tells the tree when to break bud, when to bloom, when to fruit and when to prepare for dormancy. Between the months of May and mid-August new shoots and leaf growth develop. The more leaves the more photosynthetic activity takes place. As the season progresses the tree centres its energy on developing girth size, and vascular tissues. These tissues carry sap and nutrients throughout the tree. As more vascular tissues develop the bark and wood mature.

Life Cycle of tree



What is Dormancy

This is normally shown as lack of leaves and no visible growth, not to be confused with a 'dead' tree. The tree starts to enter dormancy when the weather turns cold and with a shortening length of day. This is when the tree enters a state of rest. It is important that the tree does rest when buds, flowers or shoots cannot grow. This rest period usually takes place in December to February or even later depending on the winter period.

Pollinator

Once the trees produce flowers it is essential that they are pollinated, otherwise they will not produce fruit. This is not the case with self-fertile trees as they do not necessarily require pollinators, although they will fruit better if they do have a pollinator.



Honey bees are the biggest pollinator for fruit trees. Bees transfer pollen from one flower to another. It is known that they can fly up to one mile to pollinate other trees.

Here are a few facts about bees

They do not fly when the temperature falls below 50 degrees F (10 degrees centigrade)

As the wind increases they do not fly

In high humidity nectar becomes diluted and less attractive to bees

In very bright light bee activity decreases.

Pruning

Pruning is carried out to shape trees, remove excessive growth, dead wood, and increase light penetration. With correct pruning the air movement and light penetration allows the tree after rainfall to dry out much quicker and helps towards reducing certain diseases such as apple scab, and brown rot.

When your tree is at the desired height regular pruning restricts further expansion, and will allow light to penetrate the tree structure. Properly pruned fruit trees will produce greater fruit yields, and the fruit will have better colour and size.