

Plant Life



Why do some leaves change their colour in the Autumn?

In summer leaves are mostly green but in the autumn some change to various shades of orange, yellow and red.



This is not because the leaves have become old or that there is something in the air that turns them that colour. Nor is it because the tree is taking up food that is made up of all these colours. Believe it or not, all these colours are present in the leaves all year round! We just can't see them!



All leaves have something called **chlorophyll** (pronounced klor-o-fill) in them. This is a chemical mixture found in the cells of leaves that gives them their green colour. Chlorophyll is used by plants to make food using the energy from the sun in a process called photosynthesis.

Along with chlorophyll there are also three other chemicals found in leaves.

- Xanthophyll (Zan-tho-fill) which is yellow,
- Carotin, which is orange
- Anthocyanin (an-tho-sy-an-in) which is red.

These are found in very small amounts that cannot be seen in summer because there is so much green chlorophyll.



In the autumn, when the weather gets colder, all the food that had been stored in the leaves is sent down to the trunk and branches where it is needed to keep them alive and strong. Since no food is made at this time the chlorophyll is no longer needed. It disintegrates and the green colour disappears. Once the green colour is gone all the other colours can be seen on the leaf, leaving beautiful leaves for us to admire!



What is the difference between Evergreen and Deciduous?

Trees and shrubs can usually be divided into two groups. Those that lose their leaves in autumn and those that don't.



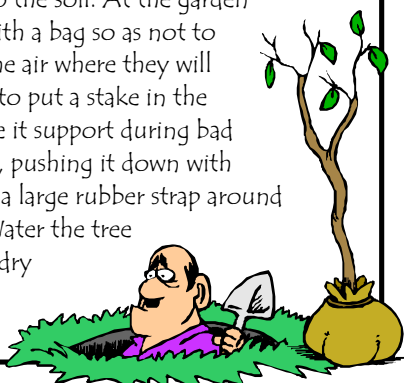
Evergreen trees, e.g. pines, keep their leaves all year

round whereas deciduous trees e.g. oak and sycamore shed their leaves in the autumn.



Planting Trees

The perfect time to plant a tree is from the start of November. At this time of the year garden centres have bare rooted trees (trees without pots and soil) which are dormant (not actively growing). Before heading to the garden centre dig a hole big enough to hold a large root and add some fertiliser to the soil. At the garden centre cover the roots with a bag so as not to leave them exposed to the air where they will dry out. It's a good idea to put a stake in the hole with the tree to give it support during bad weather. Replace the soil, pushing it down with your foot and gently tie a large rubber strap around the tree and the stake. Water the tree immediately and also in dry weather.



Why do we need trees?

Trees are very important to all forms of life. We use trees to make furniture, tools, hurleys, coffins, floors, baskets, paper, boats and houses. Trees provide oxygen for us to breath and help remove dust and pollution from the air. Trees provide habitats for animals and plants and a source of food in the form of berries, seeds and nuts. Squirrels and birds use trees for a home, food and to hide from predators. Bees and other small creatures are attracted to the nectar of trees and are also a source of food for other animals that live there. Because trees are so important we can never have enough! Plant one this autumn!



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