**Deciduous Trees**

**Week #6**

Deciduous trees are plants that drop their leaves for a part of every year, usually during periods of dryness or cold weather. Their branches remain free of foliage until conditions improve. For the tree, this means that it can save energy by not working to keep the leaves green and healthy. Despite having to deal with the fallen leaves and bare trees for part of the year, many people find this type of tree quite attractive, and they are also appreciated for their usefulness, providing wood for things like fires, building, and sculpting.

**Cause of Leaf Loss**

Trees lose their leaves when they go dormant, which is a means of self-preservation. The majority of plants require sun, light, and water to survive, and when any one of these elements is lacking, the stress triggers hormonal changes. These changes prompt the tree to put more energy into simply surviving, so the it ends up losing leaves, which take a great deal of water and energy to maintain and grow.

Leaf loss usually happens in a fairly predictable pattern. The tilt of the Earth is a key player here, as it affects both temperature and amount of light the plant receives. When a section of the globe is angled more directly toward the sun and receives more light and heat, leaves tend to grow. If part of the globe is angled away from the sun and receives less light and heat, however, leaves tend to fall. People, therefore, link the loss of leaves with annual seasonal changes, particularly autumn, even though deciduous trees technically can lose leaves at any time of the year.

**Typical Height**

Small trees that lose their leaves during some part of the year can be just a few feet (a meter or less) tall. The largest varieties can reach many times this height in extended proper growing conditions. The tallest reported sugar maple, for example, reached 110 feet (33.53 meters), and most grow at least 40 feet (12.19 meters).

**Advantages**

Many deciduous varieties, such as cherries, crabapples, [magnolias](http://www.wisegeek.com/what-are-magnolias.htm), and dogwoods, flower when they are leafless or just beginning to grow new leaves. This aids the [pollination](http://www.wisegeek.com/what-is-pollination.htm) process because the flowers are visible to insects and there are no leaves to block the wind from carrying the [pollen](http://www.wisegeek.com/what-is-pollen.htm).

Losing leaves also means that there is less surface area on which ice and snow can collect. The amount of weight on the plant isn’t as high as a result, which reduces the chances that branches will crack or break.

One of the spectacular things about these types of plants is the wide array of colors the leaves often display before being shed, which many people find quite appealing. Colors can range from bright yellow to crimson and many shades of orange in between. This incredible display often is intense enough to attract tourists or inspire art, such as photographs and paintings.

People plant these trees in part because their leaves tend to be broad enough to provide some level of protection from the elements. Broad foliage is desirable in warmer climates because it creates shade that keep people and animals cool. In fact, deciduous trees have been shown to reduce home cooling costs in the summer by up to 10%, according to the Morton [Arboretum](http://www.wisegeek.com/what-is-an-arboretum.htm). In winter, the shedding of the leaves lets the sun reach homes easily and provide more heat.

**Disadvantages**

Even though deciduous plants have an edge in terms of pollination, their leaves are attractive to a number of animals such as deer. Insects also eat the leaves. Losing too many leaves in a short time period can shock the tree or even kill it.

When conditions improve following leaf loss, deciduous trees have to expend an enormous amount of energy in order to grow them again. That means they tend to need soil that has more [nutrients](http://www.wisegeekhealth.com/what-are-nutrients.htm). People who want to plant these trees may need to fertilize the ground naturally or with commercial products.

Compared to evergreens, trees that drop their leaves also tend to have most foliage in their upper half, creating a canopy. This allows people and animals to move easily underneath, but it doesn’t provide as much privacy because the leaves don’t extend down very far. Most species really work only as simple borders and aren’t very effective as natural fences or hedges.

The colors that appear prior to the leaf shedding process can be breathtaking, but once the leaves fall on the ground, they provide a breeding environment for pests, including mosquitoes. The leaves often give off an overwhelming aroma as they decay, and they can stick to shoes and be carried indoors. People typically rake or [mulch](http://www.wisegeek.com/what-is-mulch.htm) leaves to combat these issues, but this takes time and can be physically challenging to complete.

**Uses**

Deciduous trees often are part of general [landscaping](http://www.wisegeek.com/what-is-landscaping.htm) plans, although planters need to trim them periodically to keep them shaped, prevent limb loss, and keep them from interfering with nearby items such as power lines. Homeowners sometimes select them specifically because of the color of both the leaves and the blossoms, achieving a decorating effect out of doors. They are good for climbing, and the wood from many species can be used for building, sculpting, and as firewood.