

## Professional tree care measures

The term professional tree care (arboriculture) refers to a set of measures used to support tree development and keep trees safe in terms of public and traffic safety or restore them to a safe state. When performing tree care measures, it is important to ensure that the tree's characteristic crown shape for its species is preserved. There are standards and regulations that describe how tree care measures should be done.

**Professional** crown cutting removes any undesirable developments (such as branches that are rubbing together) and supports the development of the tree. When thick branches are removed, there is always a risk of wood decay fungi getting in and damaging the tree.



*The main features of proper, professional crown reduction are the preservation of the tree's shape or habitus and reduction as far as the supplying branch / higher order branch.*

### Bibliography

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[www.baumpfleger-lexikon.de](http://www.baumpfleger-lexikon.de)  
[www.arbolex.de](http://www.arbolex.de)

## Maintain your trees!

Trees are highly developed plants and are among the largest organisms on Earth. They are living things that form an important part of our environment and perform many functions important to humans.

Do not allow your trees to be:

- Mutilated
- Damaged by non-professional pruning
- Destroyed by other human actions (e.g. damage during construction work)

**Protect and maintain your trees.**

**Choose the experts!**

The information in this leaflet comes from the book: „Praxis Baumpfleger – Kronenschnitt an Bäumen“ (Practical Arboriculture – Crown Cutting on Trees)



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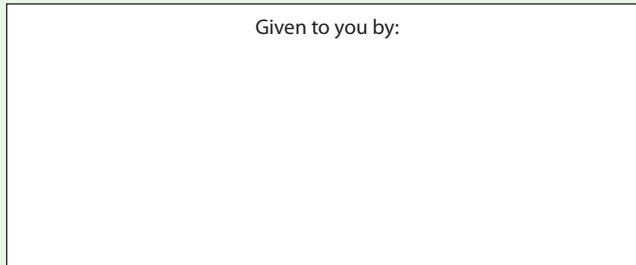
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Given to you by:



# IT IS NOT TRUE THAT THESE TREES

## are safer or less prone to shedding leaves!



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## The functions of trees

### Tree life

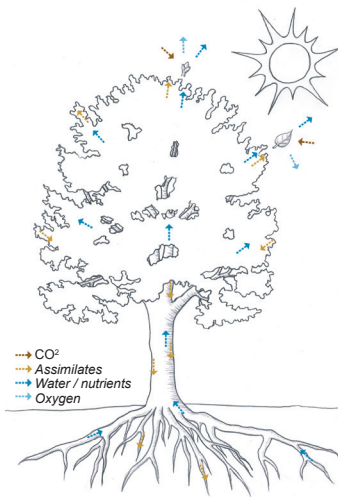
By using wood as a “building material” to allow them to grow high, trees have developed the ability to gain access to more light, and therefore more energy.

A tree’s roots anchor the tree in the ground and supply it with water and nutrients.

The trunk allows the tree to grow in height and also acts as a transport and storage system.

The crown holds the many leaves that provide the tree with

energy through photosynthesis. In all trees, there is a balance between the roots, the trunk and the crown. Every part of the tree is equally important for its survival. A tree is a system that will only work for as long as all of the parts have an adequate supply of nutrients.



### The value of trees

Trees in residential settings perform various practical and aesthetic functions that enhance our environment and make it more beautiful. They also have a high monetary and ecological value.

## Why topping is done

Topping is the wholesale removal of the crown, of parts of the crown or individual branches. What is left behind are stumps. Topping is generally done with no regard for the tree’s habitus (the crown shape) or for its physiological needs.

Trees are often topped because the owner believes (or is told) that this is the correct way to care for them. They do it out of a conviction that they are doing what is best for the tree. They believe that topping will make the tree safer or less prone to shedding leaves in autumn.

## The consequences of topping

### Lack of nutrient supply

When you take away a large section of a tree’s crown, you take away the tree’s ability to supply itself with enough nutrients, water and assimilates. Furthermore, it upsets the natural balance between the roots and the crown. Sections of the crown or the roots may start to die off as a result.

### Rot

Wood decay fungi penetrate the large wounds and damage the wood.



**Above:** Fungi penetrate the site of the topping cut and destroy the wood.



**Right:** Growth of epicormic shoots after topping, resulting in increasing risk of failure

### Unstable crown

A tree that has been topped will try to restore the lost equilibrium between the roots and the crown. It will grow epicormic shoots (shoots that grow vertically upwards). These are unstable and they compete with each other. They gradually become larger and they can break off due to their weight and due to the gradual worsening and progression of the rot at the topping site.

### The tree becomes a hazard!

### Crippling follow-up costs

Topping completely disrupts the natural balance between the different parts of a tree. As a result, laborious tree care measures will be needed, and the cost of these measures will amount to many times the cost of doing proper tree care in the first place.



### Lack of nutrient supply:

The areas next to the topping cut are no longer supplied with nutrients and start to die off (= supply shadow). Rot may start to penetrate here. The wood near the wound gradually decomposes. The epicormic shoots become increasingly unstable.

### Leaf mass

Vigorous recovery growth after topping will lead to a large leaf mass. The tree needs this to survive.

### Aesthetics

Topping causes a tree to lose its characteristic crown shape for its species. It will never again be as beautiful as a tree that has been left to grow naturally.

## Topping destroys trees

According to the applicable regulations, topping cannot be considered a tree care measure. Any company that does it regardless of this fact may have to reckon with **claims for damages**.

Topping does not make a tree safer. In fact, the risk of failure actually increases within just a few years after topping. It should therefore be considered a damaging procedure for trees. The hoped-for positive effects simply do not appear. It is not true that topped trees have a smaller leaf mass.

In municipalities with a tree protection statute in place, topping is a violation of this statute. Topping can therefore result in administrative offence proceedings against the company carrying out the work and against the tree owner.



**Topping**



**Breakage after topping**