

NORTHUMBERLAND

Northumberland County Council

Why Topping Hurts Trees

Pruning trees correctly can help to improve their vigour and ultimately extend their lifespan by removing dead, diseased or defective branches from the canopy.

However, incorrect or excessive pruning can seriously harm a tree.

What is Topping?

Topping is the indiscriminate cutting back of tree branches to stubs or lateral branches which are not large enough to assume the terminal role.

The most common reasons people give for topping their tree is to reduce the height because they fear the tree has become too large for their property or because it is dangerous. Topping is not a realistic method of height reduction, and can in time lead to the tree becoming more hazardous.

Topping leads to Stress

Topping removes 50-100% of the crown of a tree. Since the trees are the part of the tree which produce the food for the tree, any excessive removal can starve a tree. The severity of pruning triggers a survival response in the tree, in which it activates previously dormant buds in to producing new shoots as quickly as possible. If the tree does not have a sufficient store of energy to do this it can mean it is ill prepared to defend the wounds from invasion by insect, bacterial or fungal attack.

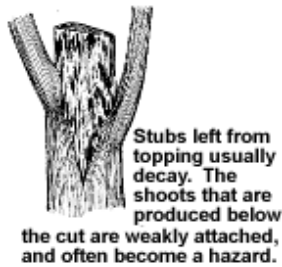
Topping leads to Decay

The ideal location to make a pruning cut is just outside the branch collar at the branch's point of attachment. A tree is designed to seal of this wound providing the tree has sufficient energy reserves to do so. Cuts made along a limb between lateral branches, creates stubs which the tree may not be able to seal off. The stub will eventually decay

back into the healthy branch. Under normal conditions a tree can wall off the decaying tissue. However, few trees can defend against the multiple wounds created through topping, thus any decay organisms are free to invade and move down through the branches.

Topping can create hazards

When a tree has been topped and the tree has reacted by producing a mass of new shoots,



hazards can occur. In normal tree growth, branches are attached to the tree by an overlapping of wood tissue which holds them securely. With topping, the branches are held by weak attachments which, as the new shoots grow and become heavier, they are prone to breaking.

Topping looks Terrible

A tree which has formed natural branches can assume various shapes depending upon its species. Its sole goal is to allow all of its leaves to have access to the sun. Topping removes the tree's ability to do this, leaving a number of ugly stubs. During the spring and summer months when new leaves have formed on the tree, the disfiguring pruning has been partially screened, however during the winter months it is exposed for all to see. A tree which has been topped can never regain its attractive, natural form.

Alternatives to Topping

There are times during the life of a tree when pruning is required. Sometimes, due to damaged or diseased branches or because of proximity to buildings or power lines, it is necessary to reduce the height and spread of a tree. In order to do this in a way which will achieve the goal required, while retaining the natural shape of the tree, there are recommended methods for doing this.

Crown reduction involves the shortening of the outermost branches of the tree back to an appropriate lateral branch.

Usually this is carried out to a side branch 1/3 the diameter of the branch to be removed. It is usually practice to remove a branch volume of no more than



If the height of a tree must be reduced, all cuts should be made to strong laterals or to the parent limb. Do not cut limbs back to stubs.

30% at any one time. This will allow the tree time to seal the wounds created and compensate for the loss of branches and leaves.

Hiring an Arborist

The pruning of large trees can be dangerous and should only be carried out by tree care professionals. An arborist can determine the best type of pruning required to improve the health, appearance and safety of a tree.

There are things to consider when hiring an arborist:

- Proof of insurance
- Membership of a professional organisation, such as the Arboricultural Association (AA) or the International Society of Arboriculture (ISA)
- Approved contractor status through the Arboriculture Association (AA)
- A list of references.

It is best to avoid any company that:

- Goes door to door looking for work. Most reputable companies do not use this method of finding work.
- Advertises topping as a service they provide. Professional arborists know that topping is detrimental to a tree and is not an accepted practice.
- Uses tree climbing spikes on trees which are to be pruned. Climbing spikes can damage trees by creating open wounds which can become infected by bacterial or fungal pathogens. They should only be used on trees that are to be removed.