NORTHUMBERLAND

Northumberland County Council

Recognizing Tree Hazards

Trees provide tremendous benefits to our homes, towns and cities, but occasionally they can cause problems and sometimes become hazardous. Dealing with hazards can ensure the safety of people and property and can prolong the life of the tree.

Trees are inherently safe structures but in extremes of weather or because of in built weaknesses, they can become dangerous. Trees, or parts of trees, may fall and cause injury to people or damage to property. We call trees in such situations hazardous, to signify the risk involved with their presence. Every tree has the potential to shed branches or fall over, but very few actually cause injury to people or property.

It is an owner's responsibility to provide for the safety of trees on his or her property. This brochure provides some tips for identifying the common defects associated with tree hazards. However, evaluating the seriousness of these defects is best done by a professional arborist. Regular tree care will help identify hazardous trees and the risk they present. Once the hazard is recognized, steps may be taken to reduce the likelihood of the tree falling and injuring someone.

Tree Hazard Checklist

Consider these questions:

- Are there large dead branches in the tree?
- Are there detached branches hanging in the tree?
- Does the tree have cavities or rotten wood along the

trunk or in major branches?

- Are mushrooms present at the base of the tree?

- Are there cracks or splits in the trunk or where branches are attached?
- Have any branches fallen from the tree?
- Have adjacent trees fallen over or died?
- Has the trunk developed a strong lean?
- Do many of the major branches arise from one point on the trunk?
- Have the roots been broken off, injured, or damaged by lowering the soil level, installing pavement, repairing footpaths, or digging trenches?
- Has the site recently been changed by construction, raising the soil level, or installing lawns?
- Have the leaves prematurely developed an unusual color or size?
- Have trees in adjacent wooded areas been removed?
- Has the tree been topped or otherwise heavily pruned?
- Does the tree have any of the above and is within falling distance of people or property?

Defects in Urban Trees

Urban trees can have many different defects. Some of these include:

- Dead branches
- Branches which have snapped and are hung up in the canopy
- Excessive pruning leading to lion-tailing

- Large open cavities

- Cracks through branches or the stem

- Trees with an excessive lean >30° (with or without basal decay)

- Trees with multiple stems with included bark

- Cankers covering more than 40% of the stem cross-section

- Trees with excess decay in the stem or branches

- Trees with more than 33% of its roots decayed or missing

- Trees showing signs of recent root plate movement

The defects highlighted above do not form a complete list. The defect on its own does not make a tree dangerous. If the defect can lead to failure of a branch or the whole tree and is likely to hit someone or something, then it becomes hazardous.

A target is a term used in the tree industry to identify a person, property or other object which can be damaged by trees. These include:

- Pedestrians
- vehicles
- buildings
- Power lines
- Street furniture
- Walls and fences

The correct identification of defects can help a tree owner manage their trees more effectively.

Managing Tree Hazards

A qualified arborist can help you manage the trees on your property and can provide treatments that may help make your tree safer, reducing the risk associated with hazardous trees. An arborist familiar with hazard tree evaluation may suggest one or more of the following:

- **Remove the target**. While a home or a nearby power line cannot be moved, it is possible to move picnic tables, cars, landscape features, or other possible targets to prevent them from being hit by a falling tree.
- **Prune the tree.** Remove the defective branches of the tree. Because inappropriate pruning may weaken a tree, pruning work is best done by a qualified tree care professional.
- **Cable and brace the tree.** Provide physical support for weak branches and stems to increase their strength and stability.
- **Provide routine care.** Mature trees need routine care in the form of water, fertilizer (in some cases), mulch, and pruning as dictated by the season and their structure.
- **Remove the tree.** Some hazardous trees are best removed. If possible, plant a new tree in an appropriate place as a replacement.

Recognizing and reducing tree hazards not only increases the safety of your property and that of your neighbours but also improves the tree's health and may increase its longevity.

Ensuring Quality Care for Your Tree

Trees are assets to your home and community and deserve the best possible care. If you would like further information regarding tree hazard identification or general advice on the management of your trees you can contact Northumberland County Council on 0845 6006400 and ask to speak to your local Tree and Woodlands Officer.