

11 WIND BLOWN TREES



Use of this worksheet

This worksheet is part of a series of interactive worksheets that has been produced in association with Husqvarna to support the delivery of training for the City & Guilds (NPTC) suite of chainsaw qualifications.

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Content

This worksheet covers the following outcomes:

Be able to sever uprooted and windblown trees using a chainsaw
Understand how to sever uprooted and windblown trees using a chainsaw

Identifying the risks when cutting timber under high tension and the precautions to be taken by the chainsaw operator

There are significant potential risks to the operator when cutting windblown timber that can often be under high tension. It is essential that operators are aware of the potential risks, and the precautions that they may need to take to ensure their own personal safety and that of others.

Explain the potential risks in the picture below and the precautions that may be necessary to safeguard health and safety.

Picture



Potential Risks	Precautions

The need to prepare the site and establish an escape route

To ensure that the task is completed as safely as possible it is essential to prepare the site properly and to establish escape routes. This is achieved by **(fill in the missing words)**:

- ensuring that the _____ measures in the site-specific risk assessment are applied
- _____ the work area and adjacent trees for dead wood and insecure branches
- prepare , agree and communicate _____ of work
- removing _____ from around trees to be processed (if required)
- establishing clear _____ route(s)

The need to prepare stems

It is important to prepare stems correctly before attempting to sever them. **In the box below list the things that may need to be done to prepare a stem for severing.**

Why severing cuts should be made at a distance

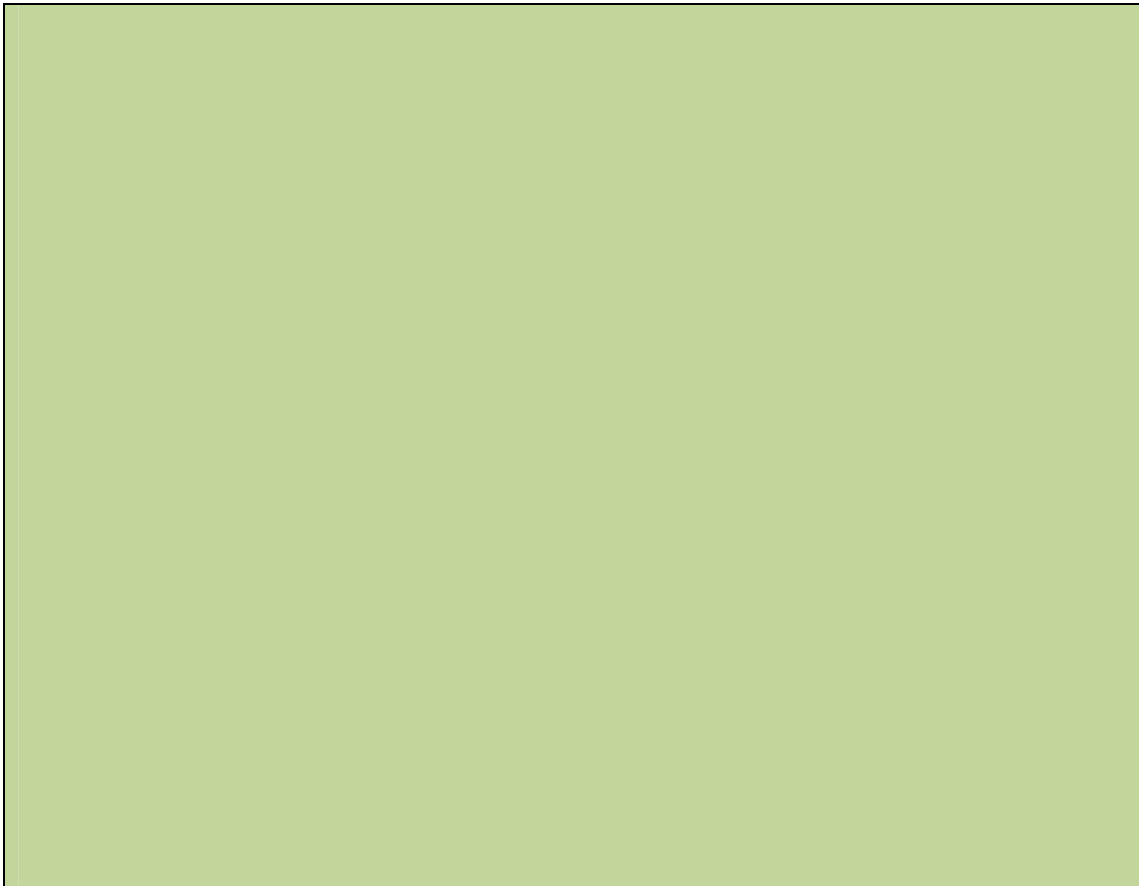
'a long log' from the root plate and the associated hazards



There a number of benefits from making cuts at a distance ('a long log') from the root plate; these include:

- **the chainsaw operator is positioned away from the root plate**
- **it reduces the need for further reducing cuts near the root plate**
- **it maximises the most valuable part of the tree**

But what are the hazards when severing 'a long log'? List them below in the box provided.



How to sever root plates using a recognised severing method appropriate for the size of the tree and its condition

The techniques used to sever root plates need to be appropriate for the size and condition of the tree. The technique chosen should ensure that:

- **there is no risk to the operator from the root plate rolling or falling, or the stem springing; which includes sideways!**
- **tension and compression in the stem are correctly identified and the method employed is appropriate to the size of the tree and its condition**
- **any reducing cuts are made on the opposite side to the final severing cuts**
- **the final severing cuts are placed in the timber taking into account escape routes**
- **appropriate aid tools are used as necessary**
- **the tree and root plate are left in a safe condition to enable subsequent operations to take place**



How to sever timber that is under severe tension and compression

List the methods that can be used in the box on the right.



Methods to sever timber under very severe tension or compression may include:

- 1.
- 2.
- 3.
4. Other?

Under restraint


A winch can be used to control the timber under certain circumstances.

State below when it might be appropriate to use a winch.

The factors that need to be considered and additional safety precautions when using winches are (enter the missing words):

- _____ of the winch
- security of the _____, consideration of multiplication of forces on anchor points with e.g. double rigging or offset (diverted) pulling
- _____ of components
- awareness of _____ zones
- need for clear _____
- roles and responsibilities of all parties _____

In the box below describe how to set up a winch for restraint of side tension, to prevent uncontrolled movement of timber.




When restraint of the root plate is necessary

In the box below state when restraint of the root plate is necessary.

-
-
-
-


Multiple tension or compression cuts

Describe in what circumstances multiple tension or compression cuts would be used.

Picture	When multiple tension or compression cuts would be used
	

'V' cuts

Describe in what circumstances a 'V' cut would be used.

Picture	When a 'V' cut would be used
	

An Open Counter Cut

Picture	When an Open Counter Cut would be used
	

What are the risks of standing on a partially uprooted plate?

- 1.
 - 2.
- Other?

How to sever uprooted trees under and over guide bar length bar length

Methods of severing uprooted trees under guide bar length include:

- **compression and tension cuts**
- **stepped cuts**

Methods of severing uprooted trees over guide bar length include:

- **reducing cuts**
- **boring cuts**

On the images below draw the stages involved in making these cuts:

Reducing cuts



Boring cuts



How to make root plates safe after severing

In the box below state how to make a root plate safe after severing it.

Method 1.

Method 2.

Notes

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