

# 05 FELLING 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 work safely**


**Be able to carry out operational chainsaw checks**



**Know relevant health and safety legislation and industry good practice**

## Additional safeguards to implement when felling

There are a number of additional safeguards that need to be implemented when felling in proximity to: paths, roads or areas with public access or where there are underground or over ground wayleaves (a wayleave is defined as access to property granted by a landowner for payment. e.g. power lines).

**For each of the pictures below, state what additional safeguards may be required.**

Picture	Additional safeguards
	In proximity to paths:

Picture	Additional safeguards
	<p>Roads or areas with public access:</p>
	<p>Underground/overground wayleaves:</p>

## Legal and environmental factors related to felling trees

A number of legal factors relate to tree felling: these may include:

- **felling \_\_\_\_\_ may be required**
- **Tree \_\_\_\_\_ (TPO's) may be in existence for the tree to be felled**
- **\_\_\_\_\_ areas (CA's) – the tree(s) to be felled may be in a conservation area**

When planning to fell individual trees or a larger forest area, you will need to take the plants and animals that live in the area into consideration. Plants or wildlife present which could be protected under the Wildlife and Countryside Act 1981; an offence could be committed if they are damaged or disturbed.




## Knowing when a tree might be difficult to fell

Trees can be difficult to fell for a number of reasons; these may include (fill in the missing words):

- the fell is \_\_\_\_\_ the capability of the operator
- the form, size or \_\_\_\_\_ make it difficult to fell
- decay or \_\_\_\_\_ is present
- there are specific \_\_\_\_\_ e.g. power lines or buildings

## How to recognise signs of disease and decay in trees and modify felling techniques accordingly

In the table below, match the picture to the correct description.

No.	Description	Impact on felling activities
1	Leaves (or needles on conifers) dead or dying can indicate root decay or death.	
2	A weak fork (poor crotch angle) may be structurally weak. Decay can develop in cracks in bark.	
3	Loose bark coming away from the stem may indicate decay/rotten wood underneath.	


<b>4</b>	Fungi and fruiting bodies are indicators of decay on the stem and roots of the tree.
<b>5</b>	Basal cavities are serious especially if between one or more buttresses.





**How felling methods are modified for:**


- **Double Stems**
- **Hanging Branches**
- **Long Limbs**
- **Large Cavities**
- **Foreign Bodies**

After discussion with your trainer, explain how felling methods need to be modified for each of the conditions indicated by these pictures.

Double Stems	How felling needs to be modified
	

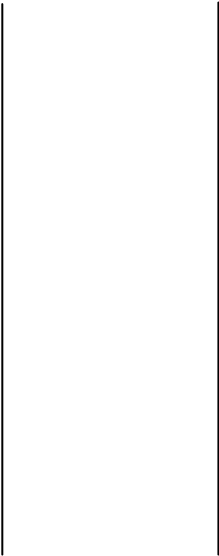
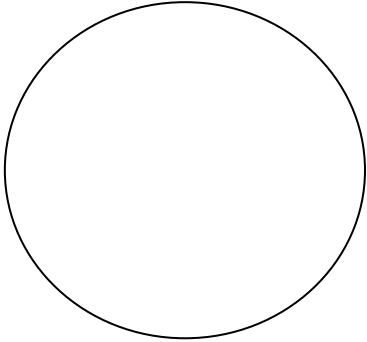
Hanging Branches	How felling needs to be modified
	

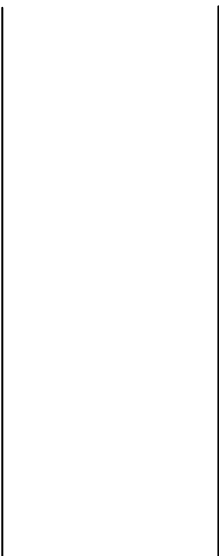
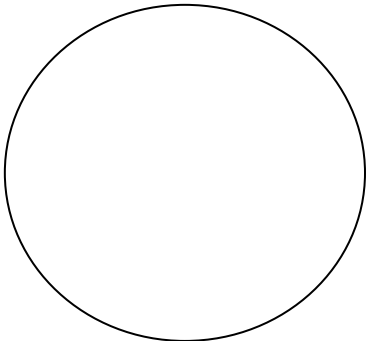
Long Limbs	How felling needs to be modified
	

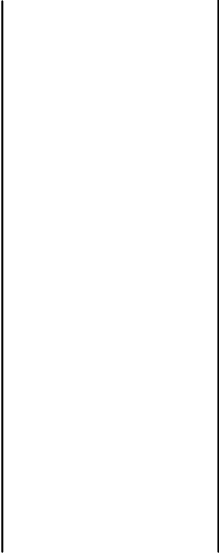
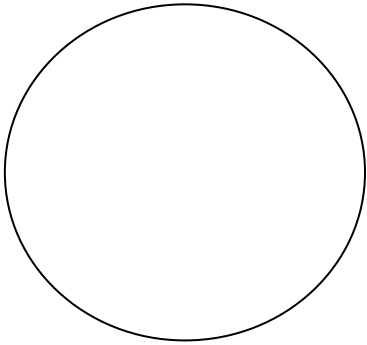
Large Cavities	How felling needs to be modified
	

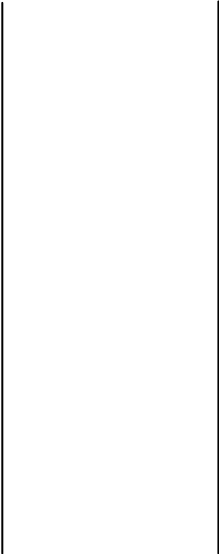
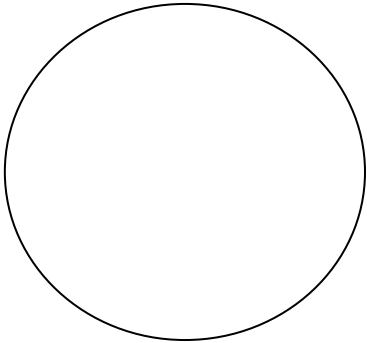
## Felling techniques

Draw the cuts that need to be made (as applicable) onto the images below.

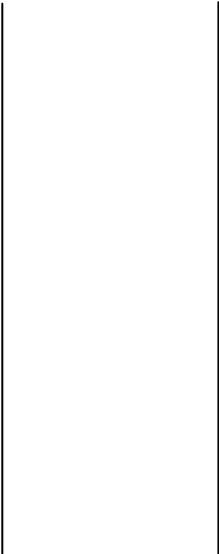
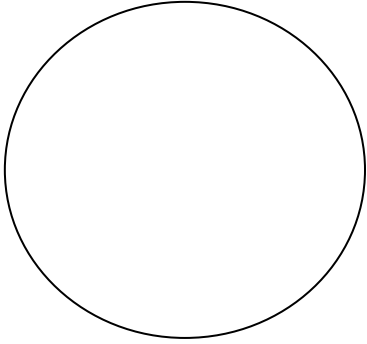
Tree	Stump	Cut
		

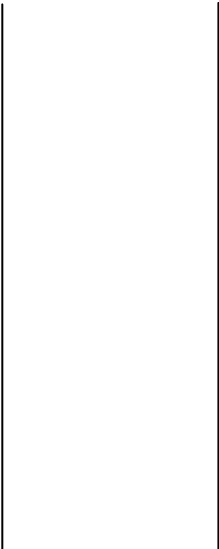
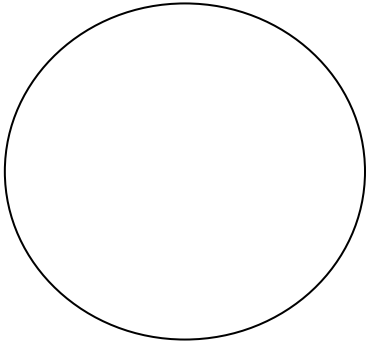
Tree	Stump	Cut
		

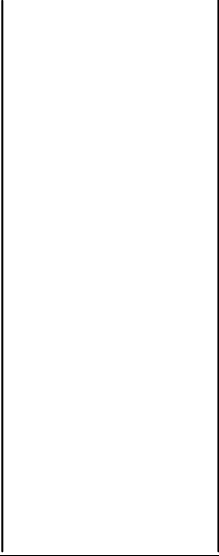
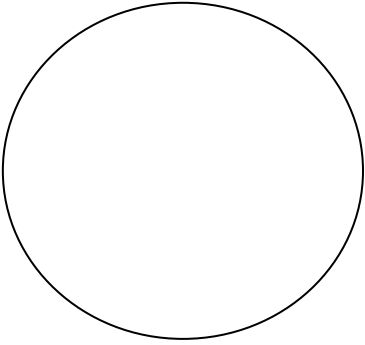
Tree	Stump	Cut
		

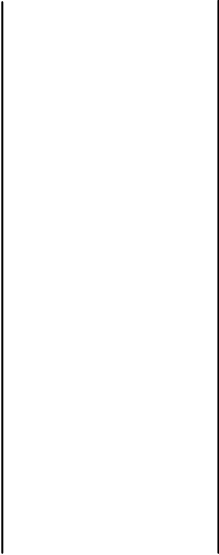
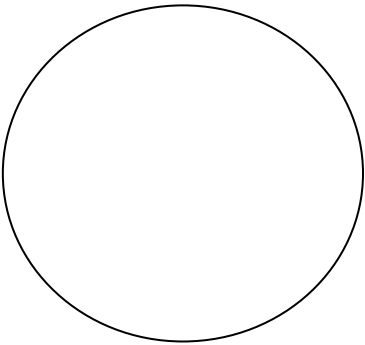
Tree	Stump	Cut
		



Tree	Stump	Cut
		

Tree	Stump	Cut
		

Tree	Stump	Cut
		

Tree	Stump	Cut
		

## How and when to use additional equipment to assist with the felling of trees

Additional equipment may be required to fell trees when:

- additional leverage is required
- there is a risk of the tree “sitting back” and trapping the saw
- the tree form, size or weight dictates that additional equipment is required

Name each piece of equipment in the picture below and state its use.

Name:  
Use:

Name:  
Use:

Name:  
Use:



Name:  
Use:

Name:  
Use:

Name:  
Use:

## Preparation of the site prior to felling

Before actually felling the tree, the site needs to be properly prepared.

This may involve

(fill in the missing words below):

- ensuring that the \_\_\_\_\_ measures identified in the site specific risk assessment are applied
- determining the \_\_\_\_\_ direction in relation to the method of extraction or conversion
- setting up a \_\_\_\_\_ if required
- removing debris around the \_\_\_\_\_ of the trees to be felled and compact vegetation to facilitate felling at appropriate height
- removing dead or suppressed trees and any other vegetation adjacent to the \_\_\_\_\_, in the \_\_\_\_\_ direction or \_\_\_\_\_ routes that may be a danger
- inspect the felling area and adjacent trees for \_\_\_\_\_ wood and insecure branches
- ensuring that no unauthorised person is within \_\_\_\_\_ tree lengths.



## How to fell standing stems and the additional safeguards required

Standing stems can be felled using conventional felling techniques, or when necessary (depending on individual trees) alternative felling methods may need to be employed.

These include **(enter the missing words)**:

- \_\_\_\_\_ felling techniques
- the use of \_\_\_\_\_ to provide adequate leverage.

## How and when to use additional equipment to assist with the felling of trees

Additional equipment may be required to fell trees when **(enter the missing words)**:

- additional \_\_\_\_\_ is required
- there is a risk of the tree “sitting back” and \_\_\_\_\_ the saw
- the tree form, size or \_\_\_\_\_ dictates that additional equipment is required

## Notes

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