

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 remove branches and breakdown crowns using a chainsaw Know relevant health and safety legislation and industry good practice Know how to remove branches and breakdown crowns using a chainsaw

Methods of branch removal vary with tree species

The method of removing branches will vary with tree species, branch form and pattern.



De-limbing is the process of cutting off the branches of a felled tree. The term is usually applied to deciduous trees with a crown of branches, but may also be applied to large coniferous trees.



Snedding is the process of stripping the side branches from felled trees to leave a smooth log. The term is applied mainly to coniferous trees, but also to small deciduous trees which have not developed a large crown.

The risks to consider when snedding

The following are risks that should be considered (fill in the missing words):

contacting _____ with the chainsaw
tree ____ onto the operator
____ from cut branches or saplings when severed
from the saw.

Identifying tension and compression in branches

It is important to identify the tension and compression in branches; this can be done in two ways:

- visually, by looking at the branch and assessing where the tension exists
- manually, by lifting or pushing against the branch to feel where the tension exists.

Examine the picture below and indicate on the branches where tension and compression is present.



The basic rules for snedding/ de-limbing

- Work at comfortable height trees can be felled so that they rest at a comfortable height for snedding.
- Safe working position adopt a secure stance, the saw working on the opposite on of the trunk; do not move whilst snedding. Never work on the lower side on a slope.
- Balance the chainsaw on the trunk or leg to reduce fatigue, always use a short guide bar (13 -15") as snedding will be easier.
- **Safe movement** keep the saw on the other side of the tree and activate the chain brake when moving around.

- Be aware of the potential for kickback avoid cutting with the tip of the bar, keep hands correctly positioned.
- Consider the weight of the branch cut on the opposite side where the branches are tensioned, avoiding pinching the bar. On large branches, cut in stages.
- Remove branches when removing branches, lock the chain brake, rest the chainsaw on the trunk and remove branches with the left hand.

Method of snedding



Using appropriate aid tools and methods

There are a number of tool/pieces of equipment that can be used to assist with the snedding/de-limbing of trees; these include:

- a winch to restrain timber, especially on slopes or when there is a risk of the tree rolling
- a felling aid such as a felling bar with a cant hook.

Removing under branches

Once the branches on the left side, right and top have been removed, the log/trunk can be turn allowing access to the under branches. If the tree has been felled onto a bench then it will be possible to remove the majority of the branches as indicated in the picture below.



There are some specific methods for dealing with

problem branches

Gradual reduction of the tension in the branch



- **1.** Make a few cuts, about 1/3rd of the branch diameter, on the inside of the bow.
- **2.** Cut gently from the outside of the bow until the branch breaks.

Crosscutting rough branches without splitting



- **1.** Make a cut on the underside of the branch, up to half the branch diameter, a little way from the trunk.
- 2. The next cut is sawn on the branch's top side, a few centimetres beyond the first cut, up to half the branch diameter.
- **3.** The branch will break between the cuts along the wood fibres.

Soft breaking of a tensioned branch



- **1.** Hold the chainsaw, as shown. Avoid using the top of the bar.
- **2.** Cut carefully, in stages, a diagonal cut on the outside of the bow until the branch breaks.

The advantages of leaving a clean stem after

Snedding/de-limbing

State the advantages of leaving a clean stem after snedding in the box below.



The advantages of a clean stem are:

How to deal with the arisings from snedding/delimbing

The arisings left behind after snedding can be dealt with in the following ways:

- left where they land
- moved and piled/stacked
- windrowed
- baled, possibly for use as a brash mat or to be processed
- processed for mulch
- processed into chippings for fuel

Notes

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