

Chainsaw Clearance of Windblow

Irish Forestry Safety Guide
(IFSG)
306



Introduction

This leaflet applies to the manual harvesting of areas where the majority of adjacent trees have been windblown or broken and also to sporadic windblow, within or outside standing crops. Mechanised systems should be considered as a safer alternative. For guidance on personal protective equipment (PPE), the machine, preparing to work, maintenance, fuelling and starting procedures see IFSG leaflet 301 Using petrol-driven chainsaws.

You can use this leaflet, along with the chainsaw manufacturer's handbook, as part of the risk assessment process to help identify the controls to put in place when using a chainsaw to clear windblow.

You must also assess the effect of the site and the weather as well as following this guidance.

All operators must have had appropriate training in how to operate the machine and how to carry out the tasks required.

Warning: This operation is very hazardous. Assess every situation carefully.

General advice

- 1 NEVER work in windblow on your own.
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- 2 Ensure you hold the appropriate competency in windblow for the task you are undertaking.
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- 3 Do not walk or work under unstable windblown trees or root plates.
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- 4 Avoid walking along the stems or branches of windblown trees.
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- 5 When working in windblow in conjunction with machinery an agreed system of work and a suitable system of communication must be identified.

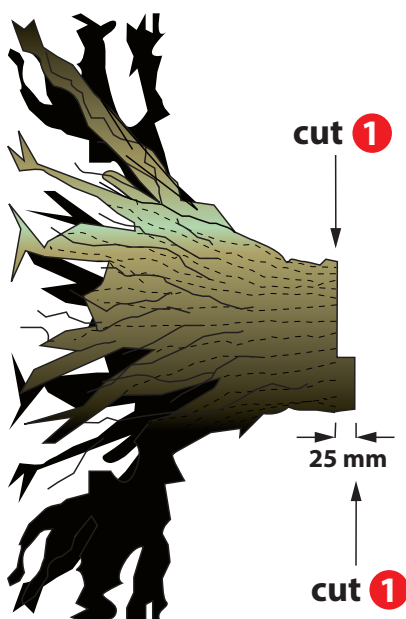


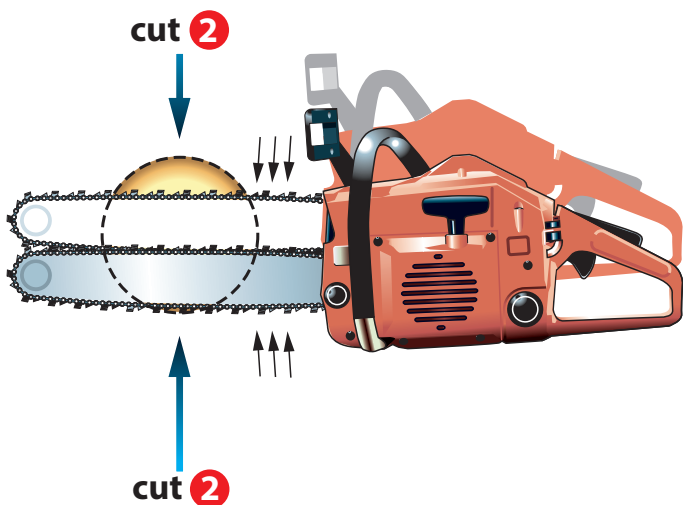
Figure 1:
Severing cuts

Preparing to work

- 6 Establish safe access and egress on the worksite
- 7 Whenever practicable you should work from butt to tip.
- 8 Check that all necessary aid tools including winches are readily available and in a serviceable condition.

Working

- 9 A safe method of operation for the work to be done must be agreed to ensure that a safe working distance can be maintained between workers and between workers and machinery (outside the risk zone of the machines being used).



10 When felling or taking down standing, leaning or broken stems, ensure no other person is closer than twice the length of the tree to be felled.

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11 Select and clear suitable escape route(s).

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12 Clear debris and obstructions to create an adequate working area and check for small trees pinned by the windblown trees. Relieve tension in these before dealing with the larger ones.

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13 Look out for dead wood, insecure branches and broken tops both in the windblown trees to be severed, and in adjacent standing trees. Be aware of unstable standing trees. Be constantly aware of the likely danger, especially when the tree begins to move.

- 14 Be alert to the possibility of stem movement caused by pressure of, or removal of, other material.
- 15 When the root plate overhangs your work position, anchor it back securely before severing the stem.
- 16 Adopt a secure and balanced stance.
- 17 Do not use the saw above shoulder height.
- 18 When severing a stem, always make the initial cut into the compression wood.
- 19 Ensure that severing cuts at the butt end of the stem are as close to the root plate as practicable.
- 20 All cuts must be watched carefully to ensure the expected reaction is occurring. In particular, be aware of hidden side tension or twisting that may result in the cut pinching on one side of the stem.
- 21 On bent stems and branches, identify where tension and compression wood occurs. Remember that enormous power may be released by cutting into the tension wood of even relatively small material.
- 22 When there is a danger that the stem may spring upwards, make the final severing cut into the tension wood at least 25 mm away from the first (compression) cut and into the part of the stem that is least likely to move (*see Figure 1*). A series of cuts may be made on the compression side to relieve excessive tension in the stem.
- 23 When side tension is present in a stem, stand on the compression wood side to make the final cut.

24 At any time when side tension is considerable, restrain the stem with a winch.

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25 When the stem diameter is greater than the guide bar length, a reducing cut should be made which leaves the remaining portion slightly less than the effective guide bar length.

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26 Make every effort to replace the root plate once the stem is severed.

Broken trees

27 When the partially broken top of the tree is in contact with the ground, cut away the top where it comes into contact with the ground and any accessible branches (see Figure 2).

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28 Where possible remove the broken portion using a winch.

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29 Do not work under the broken top and be aware of the direction in which the top may fall.



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Fell the upright section of the stem using normal felling techniques. The felling direction should be at right angles to the broken portion if still attached. Be sure it is secure before work starts (see Figure 2).

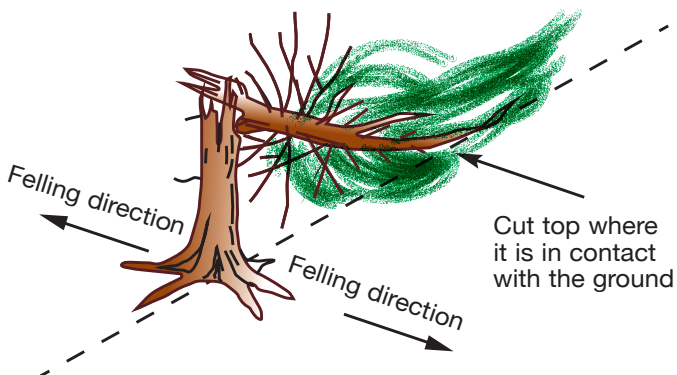


Figure 2:
Felling a broken tree

Further Information and Guidance:

Visit our website at www.hsa.ie, telephone our contact centre on **1890 289 389** or email wcu@hsa.ie

Use BeSMART, our free online risk assessment tool at www.besmart.ie
Check out our range of free online courses at www.hsalearning.ie



Further reading

Available at www.hsa.ie/eng/Publications_and_Forms/Publications/Agriculture_and_Forestry/

- Code of Practice for Managing Safety and Health in Forestry Operations
- Information on Health and Safety Responsibilities of Forest Landowners who intend to fell their trees
- Guide to Safe Working with Timber and Chainsaws
- Chainsaw Safety Training Advice Information Sheet

IFSG Leaflets:

- 301 - Using Petrol Driven Chainsaws
- 302 - Basic Chainsaw Felling and Manual Takedown
- 303 - Chainsaw Snedding
- 304 - Chainsaw Cross Cutting and Manual Stacking
- 306 - Chainsaw Clearance of Windblow
- 307 - Chainsaw Felling of Large Trees
- 503 - Extraction by Forwarder
- 603 - Mechanical Harvesting
- 804 - Electricity at Work: Forestry

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This guide sets out evidence of good practice for a specific forestry task. Deviation from the guide should only be considered after a full risk assessment has been undertaken by competent persons. Health and safety obligations MUST be met at all times.

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