

# HOW TO USE TREE FELLING TOOLS



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The size of the tree determines which felling tools you need to use. For the smallest trees, you do not normally need the felling tools. Hand force is enough, possibly with a long pole. The felling wedge provides greater felling force than the different types of breaking bar. In extreme cases, you can use a rope and winch, which is the safest and most powerful way to fell a tree.

## Foot breaking bar



The foot breaking bar is suitable when thinning and for smaller trees. Insert the foot breaking bar before completing the felling cut. Stand and put all your weight on the lever arm. The foot breaking bar is generally telescopic and can be carried in a holster on your logging belt.

## Breaking bar



The breaking bar is available in different handle lengths providing you with varying amounts of felling force. Avoid breaking bars with a long handle for really thick trees and large backward leans, as this may require a lifting height that is greater than you can handle. Maximum lifting height: approximately 2 cm.

## Impact bar



The impact bar is used in the same applications as the breaking bar. It can also be used as a striking tool when using felling wedges.





## Felling wedge



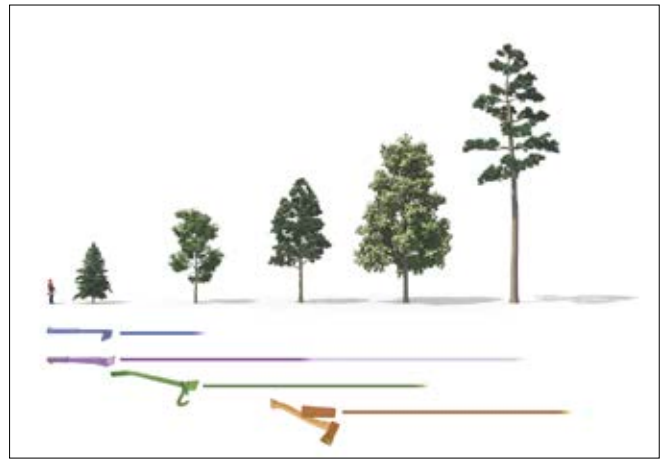
Felling wedges are best for medium to large trees as they provide a lot of lifting force. They are inserted before the felling cut is complete, and are knocked in with an axe or an impact breaking bar. Occasionally, several wedges are needed. It's always good to use wedges made of a soft material, such as plastic or aluminium, should you happen to cut into the wedge, thus eliminating the risk of damaging the chain. Maximum lifting height: approximately 50 – 60 mm.

## Rope and winch



Using rope and a winch to help take down a tree increases safety and can speed up the process considerably. The rope and winch solution is beneficial, for example, when pulling down dead trees, or to extract half-fallen, stuck trees. It can

also be used to determine the felling direction. The size of the tree determines the strength of the rope (or cable) you need for the job.



## Other useful tools

### Tool belt



To keep all your vital gear close and secure, a good tool belt is the very best solution. The Husqvarna tool belt Flexi is a flexible and ergonomic belt with excellent weight distribution and pockets and fasteners for wedges, files lifting hook, combi tool, measuring tape and your small axe.



## Sappie



The sappie is an extremely useful tool to manually lift, transport, turn or stack logs, making the arrangement of wood piles easier. Just as with any other lifting tool, it's important to make sure the blade's pointed hook is sharp enough. If not, it's easy to file. The sappie is available in different sizes, all depending on the size of the logs you're working with and will extend your reach and spare you from lifting, saving you from unwanted back pain.

## Measuring tape



The most common logger tape is 50 feet/15m long, but it's available in many other lengths. The tape should be equipped with a swivel snap for attaching it to a belt as well as a quick-release nail end that you attach to log ends, making it easy to move the needed distance, along the tree or log, to measure length or diameter correctly, then release the nail with an easy tug.

## Gas/oil can



Needless to say, a combined petrol/oil can with filling protection that prevents unnecessary spills, is a given to avoid running out of fuel when working in the forest. By using alkylate petrol, such as Husqvarna XP® Power 2, you can lower the amount of harmful emissions from your chainsaw. If you use regular petrol, you should mix it with a high quality 2-stroke oil (XP®-oil is recommended). For chain lubrication, we recommend vegetable chain oils that are biodegradable.

## Lifting hook and tongs



A lifting hook is used to lift and turn the logs. Lifting tongs are used to lift and move the smaller logs and pieces of firewood and pulpwood. It is very important that your tongs and hook are pointed and sharp to ensure good grip on the logs.



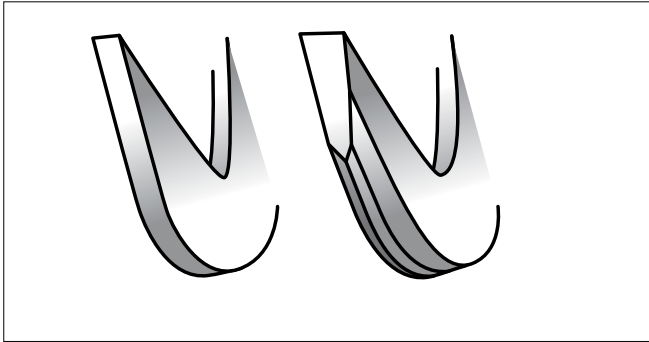
## METHOD

### Using the lifting hook and tongs

#### Grinding the lifting hook and tongs

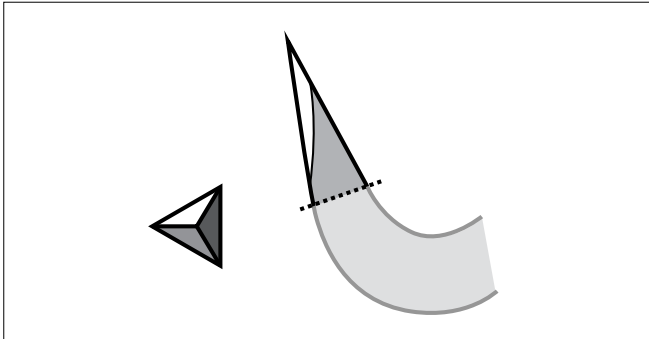
In order to ensure good grip on the logs, it's important that your hook and tongs are pointed and sharp. Blunt hooks and tongs are inefficient and can be dangerous as you can easily slip and cause injuries.

#### Filing the lifting tongs



The tip should be sharpened in a chisel shape to easily release the tongs from the timber. File from the outside of the hook. However, make sure not to file to a point, as this might get stuck in the timber.

#### Filing the lifting hook



You file the hook from the sides and the inside of the hook. File towards the tip. This method retains the tip naturally.

### Testing the lifting hook



Check the function of the tip by pulling it horizontally, with light pressure on the handle, along the grain on a wooden board or bark-free log. A properly sharpened tip attaches evenly to the wood and ploughs a slight groove.



## 1

Start by making a cut from the top side. The depth of the cut should be about one-third of the diameter of the trunk, or before the trunk tends to pinch the guide bar.

## 2

Now cut from the bottom to meet the first cut. Saw until the log is cut through.

### METHOD

#### Pressure on top: crosscutting thick trunks

If the pressure is on top and the trunk is thicker than the bar length:



## 1

Start by crosscutting the opposite side of the trunk.

## 2

Pull the saw towards you and crosscut from the top, up to about one-third of the trunk diameter.

## 3

Now crosscut from the bottom. Make a bore if the trunk is lying on the ground to avoid sawing stones.

## 4

Continue with undercutting towards the centre of the trunk.

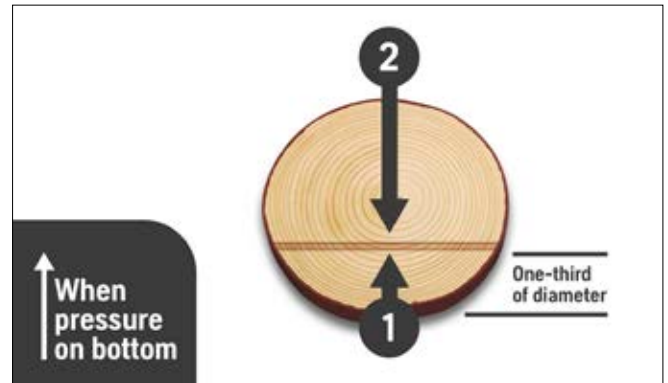
### Pressure on bottom

When the trunk lies so that the pressure comes from the bottom, you must perform the crosscutting in a reversed sequence:

### METHOD

#### Pressure on bottom: basic crosscutting technique

For trunks where the chainsaw's guide bar reaches all the way through:



## 1

Start with the undercut up to about one-third of the trunk diameter, or until the guide bar tends to pinch.

## 2

Now cut from the top to meet the first cut. Saw until the log is cut through.

### METHOD

#### Pressure on bottom: crosscutting thick trunks

If the pressure is on the bottom and the trunk is thicker than the bar length:



## 1

Start by crosscutting the opposite side of the trunk.

## 2

Pull the saw towards you and cut a little from the top.

## 3

Now crosscut from the underside, up to about one-third of the trunk diameter. Make a bore if the trunk is lying on the ground.

## 4

Finish with a top cut.

