

Felling by the use of hand tools or chain saws. Only fell trees that are marked for felling.

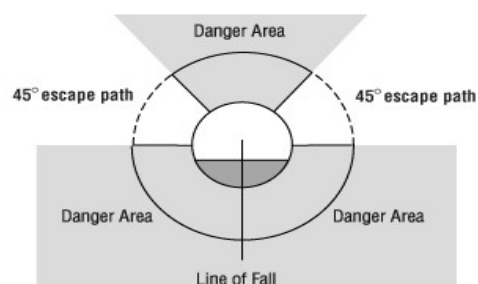
**Chain saw felling.** Ref FISA Guide 302.

1. Only to be undertaken by operators qualified to the appropriate nationally recognised level for the tree and within the limitations stated in the Chainsaw risk assessment. Much of what is below is still applicable, but specific chainsaw requirements take precedence.

**Hand tool felling.** Elements of FISA Guide 302 are relevant for hand tool felling.

1. Only to be undertaken by people who have been shown how to use the hand tools correctly (ref Safe and effective use of hand tools document) and have had a demonstration of felling techniques and are wearing PPE appropriate to the situation. E.G. gloves, helmet, sturdy boots, glasses.
2. Select the trees to be felled in order to minimise the potential for hung trees.
3. Fell in a direction the tree's weight naturally wants to take it.
4. Consider the effect of wind forces.
5. Look out for dead branches / tops that may fall unexpectedly. If necessary, rope them and pull them down. Seek advice from the session leader in unclear.
6. Separation of 2 tree lengths to be maintained between the tree being felled and other workers.
7. Maintain clear escape paths and avoid the danger areas as per the diagram below. If this means branches need to be removed from adjacent trees, use a back cut then prune to the branch collar.
8. Make directional cuts to create a mouth (gob) 1/4 to 1/3 of the tree diameter and that faces the intended felling direction.
9. Make the felling cut in the back of the tree and aim for it to intersect the gob at approx. 1/3 of its height. Do not cut through the hinge as it is there to control the direction the tree will fall.
10. Hung trees, FISA Guide 302 paragraphs 28, 29, 30, 31.
  - a) Hung trees require special techniques to safely bring them to the ground. Their motion can be difficult to predict. Dealing with hung trees should only be undertaken by people who have been shown how to in a practical demonstration.
  - b) The danger zones and escape paths should be maintained.

- c) Excluding other workers from the danger zones is a priority as it may not be obvious to them that there is a potential hazard from a hung tree. Use banksmen, consider the use of hazard tape. A hung tree should not be left unattended until it is on the ground.
- d) The preferred technique to bring the tree down is to roll it using a felling bar. If the hinge is intact, it will be necessary to partially sever it such that what remains is on the side that it is intended it falls. A simple roll may be sufficient, but rocking back and forth is often necessary.
- e) If it refuses to move, sever the hinge and use a lever used to push the butt of the tree away from the intended direction of fall. Work in the 45-degree escape path zones.
- f) If after all of the above the hung tree remains stuck, seek help from the session leader or support.



#### Version history.

Revision	Date	Authors	Description
1.0	17/10/01	GB	Document created.
1.1	18/02/10	GB	Version history added. Exact date added to the title. Paragraphs changed from bulleted to numbered / lettered. Hand tool felling. Point 1. edited to refer to Safe and effective use of hand tools document. Point 7. edited to include reference to pruning. Point 10. f) added.
1.2	18/02/12		Hand tool felling point 8 edited to state size of gob is $\frac{1}{4}$ to $\frac{1}{3}$ of tree diameter. Was $\frac{1}{3}$ .
1.3	18/02/15	GB	Hand tool felling point 5. added information.