

To include in all translations: This is a translation of the original English version of the EFESC handbook and its appendices. This translated version is subordinate to the original English version.

Guideline on Cable Assisted Felling (CAF)

ECS3: “a safe winch system must be installed”

„The winch must be adequate for the size of the tree. All components, including anchor points, must be fit for purpose and compatible with the system used.“

- The winch can be hand or machine operated and must be inspected as applicable.
- All cables, shackles, slings, pulleys, and other possible attachment devices must be in reliable condition and used according to the manufacturer's instructions.
- Consider the increase of force when re-routing a cable via a pulley.

1. Safety- and Risk-zones on Cable Assisted Felling (CAF)

General definitions

Authorised persons:

Only the tree feller, colleagues, trainer, and trainees who are involved in (and are aware of) the activities can be considered as authorised persons on site.

Unauthorised persons:

All other people (e.g. hiking, mountain bike, tourist, locals ...)

Safety zone:

Unauthorised persons and/or machines, which are not required for the work, may not be within a minimum of 2 tree lengths around the tree to fell during felling and pulling operations.

Risk/Danger zone:

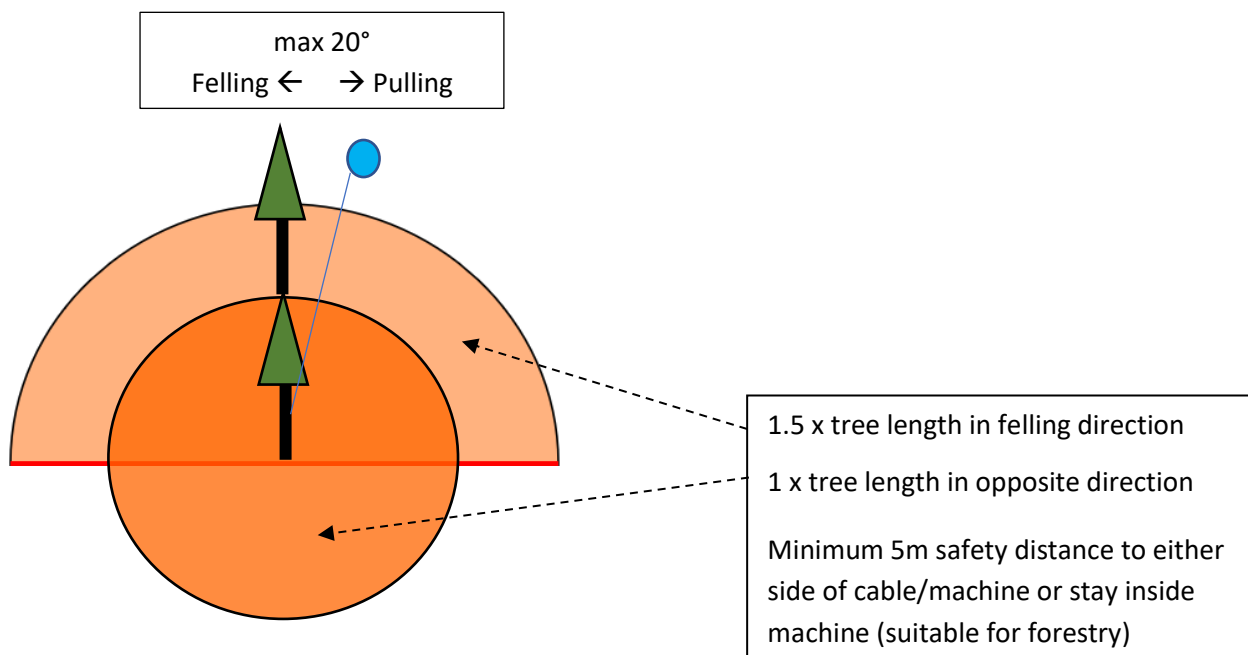
This is the zone where, during felling operations, trees (due to domino effect) may fall, parts of trees (broken off), or winch system components may fail and be projected or damaged.

No persons and/or machines allowed (for exceptions see point 3.b below).

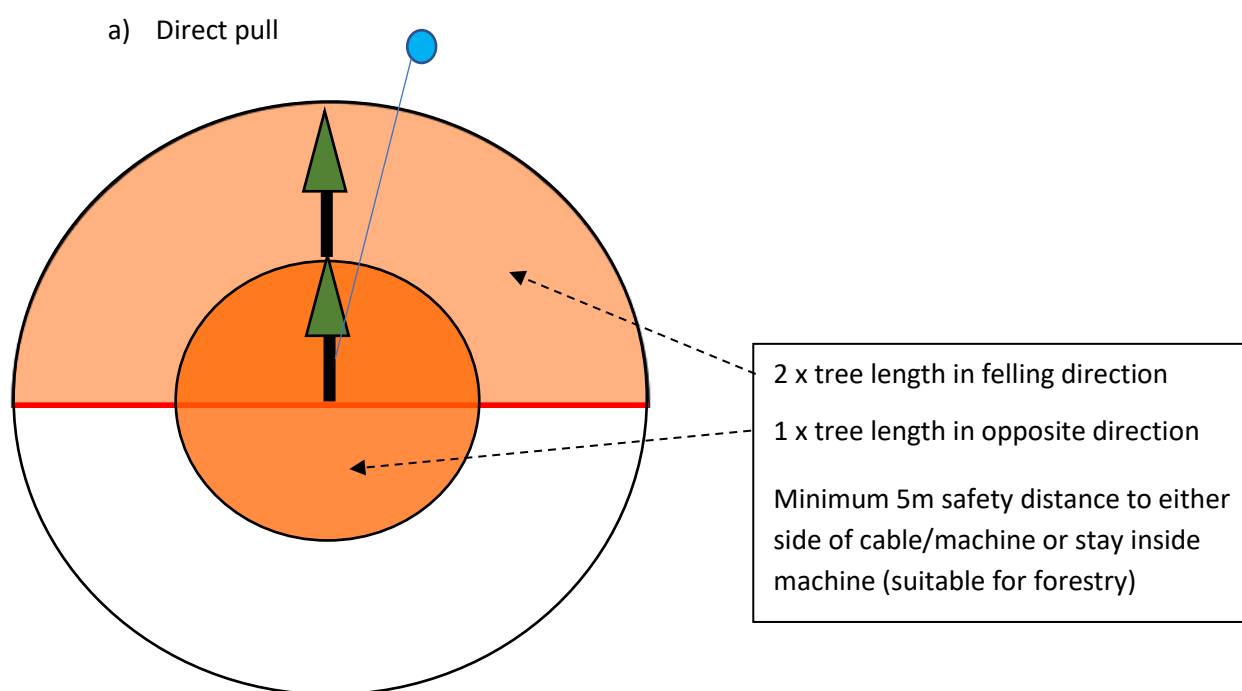
2. Standard procedure on risk and danger zone for winch and its operator

● = winch position

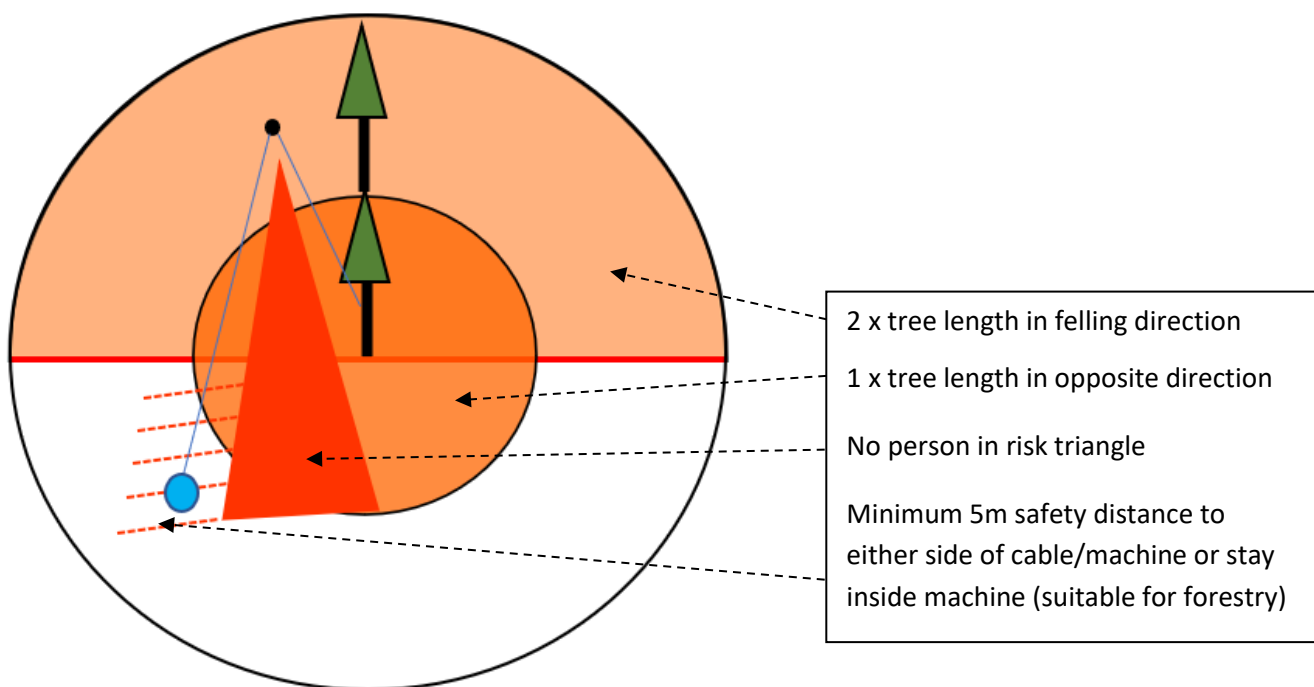
- For single tree situation:



- For forest/woodland situation:



b) Indirect pull



3. Important remarks

- a) It is up on the person who is felling the trees to organize a safe as possible work environment. Others can surely supervise when visibility is poor. In this case, effective communication is crucial.
- b) It is not realistic for the tree feller to leave the danger zone of one tree length every time: Leaving the most hazardous branch-drop zone of 8m, before the start of pulling, is sufficient when felling trees which are in normal condition. The rear hold with a step-cut felling technique is recommended to control these actions. If trees have extra risks (e.g. dead, dying, hanging branches, etc.), supplementary risk assessment and additional measures need to be taken.
- c) Also the winch operator always needs an effective escape route.
- d) For the use of a hand winch: safe position beside the winch and head/face protection.
- e) If terrain conditions (slopes, roads, buildings, rivers, etc.) don't allow following the standard procedure on safety distances, more a priori planning & risk evaluation necessary (equipment, machinery, techniques, procedures) need to be made.