

A Guide to Safe Work Practice

(Second edition)

1. Introduction

- 1.1 This leaflet provides guidance on minimum standards for safe work practice in tree work operations including aerial work techniques, use of saws in trees and organisation on work sites for aerial tree work.
- 1.2 Tree work operations are potentially hazardous to people and property. They should only be carried out by skilled, fully trained operatives.
- 1.3 The leaflet describes safe methods of work and provides guidance for operatives, employers, clients and national work safety boards.
- 1.4 The guidance should be used in conjunction with all relevant EU and national safety regulations and recommendations.
- 1.5 The European Arboricultural Council is a forum of representatives from arboricultural organisations throughout Europe, which has the objective of advancing professional standards of tree care.

2. General

- 2.1 Tree Work operations are physically demanding. Operatives should be fit and regular medical examinations are recommended.
- 2.2 All operatives must receive appropriate training and certification, where it is nationally available, for the tasks they are required to perform.
- 2.3 All aerial tree work must be carried out by a team of two or more persons. At least two of the team should have the ability and necessary equipment to carry out an aerial rescue.
- 2.4 Provision for administering first aid on site must be made at all times. All operatives should be trained in emergency first aid procedures and receive regular update training. Climbers are recommended to carry a clearly marked and accessible personal first aid kit.
- 2.5 A risk assessment of the work site and each individual tree must be carried out prior to and for the duration of the operation. The risk assessment must include provision for emergency descent and aerial rescue.
- 2.6 Extreme weather conditions may impair the operative's ability to carry out work. Sufficient breaks should be taken to minimize the risk of fatigue and dehydration.
- 2.7 All equipment must be stored and handled in accordance with manufacturers' recommendations.
- 2.8 All equipment must be inspected before use, and on a regular basis in accordance with manufacturer recommendations and national guidance and regulations.

3. Aerial Work Methods

Treecare operations can be carried out by using a mobile work platform or climbing techniques using a rope and harness.

3.1 Climbing techniques using a rope and harness

- 3.1.1 Warm up exercises prior to climbing are recommended to minimise muscle injury.
- 3.1.2 Specialised ropes and harnesses are available and must be used. All climbing equipment produced after July 1st 1995 must conform to relevant EN specifications where they exist.
- 3.1.3 A sit harness with leg loops may be used for work positioning, i.e. when working no higher than the anchor point with a taut rope or minimal slack.
- 3.1.4 If the climbing method exposes the climber to the risk of vertical fall suitable fall arrest equipment must be used i.e. a full body harness and energy absorber.
- 3.1.5 Karabiners that are used to connect the harness to the lifeline must have a spring loaded, self-locking gate that requires at least three distinct movements to open it. Karabiners should be kept in correct alignment when in use and not 'chain linked'.
- 3.1.6 Footlock methods of rope ascent must only be used if the climber is securely attached with a suitable friction knot or mechanical ascending device.
- 3.1.7 Anchor points should be carefully selected to ensure free running of the climbing rope and to safely support the weight of the climber. Anchor points should be visually assessed and weight tested by the climber before ascent, particularly where the anchor point has been installed by use of a throwline.
- 3.1.8 Friction savers should be used where possible to reduce damage to the tree and the rope and to improve the efficiency of the climbing technique.
- 3.1.9 The climber must be secured to the tree at all times by means of the climbing rope and/or strop(s).
 - 3.1.10 Once in the tree, supplementary anchor points should be installed where the risk assessment dictates, to ensure that the safety of the climber is not put at risk for example; from a pendulum fall; where the strength of the anchor point may be uncertain or compromised; or where there is a risk of the climbing rope being cut.
 - 3.1.11 The climbing rope should be long enough to allow descent from the work position point to the ground. Very long ropes can be impractical to use and other provision may be necessary for descent from exceptionally tall trees.
- 3.1.12 The end of the climbing rope should be knotted to prevent it passing through the friction knot or descending device.
- 3.1.13 Climbing irons (or spikes) may only be used during sectional felling operations to assist ascent and work positioning. The climber must remain attached to the tree through the use of additional ropes or strops when passing obstacles such as side branches.

3.2 Mobile work platforms

- 3.2.1 Manufacturers' recommendations for use of mobile work platforms must be followed at all times.
- 3.2.2 The loadbearing capability of the ground must be assessed carefully to ensure the stability of the platform.
- 3.2.3 The platform should only be used for operatives and necessary tools. The platform must not be used as an anchor point for lowering tree sections or for transporting tree sections.
- 3.2.4 When the platform is used to provide access for pruning or sectional felling, operatives must be trained in branch removal techniques.
- 3.2.5 Care should be taken to prevent falling branches from hitting any part of the platform, boom or transporting vehicle.
- 3.2.6 Operatives must not over reach from the platform and it is recommended that they be secured to a designated anchor point with a suitable harness and adjustable lanyard.
- 3.2.7 The safe working load of the platform must not be exceeded.

3.3 Ladders/static work platforms

- 3.3.1 Ladders are principally used for access to the crown of the tree. If work is carried out from the ladder the operative must be attached to the tree by a rope/strop and harness. The top of the ladder should also be secured to the tree.
- 3.3.2 The ladder must be placed firmly to prevent slipping or twisting, at an angle of approximately 75 degrees (base distance from the tree equal to 1/4 ladder height). Special ladder footing devices may be necessary to improve stability on uneven or slippery surfaces.
- 3.3.3 Static work platforms such as scaffolding should be positioned so that they are stable and not at risk from the operation being carried out.

4. Use of Saws in Trees

- 4.1 Handsaws should be used in preference to chainsaws wherever practicable in the tree.
- 4.2 Chainsaws should only be used for aerial tree work by competent climbers who have been trained in their use and passed a national certificate of competence where this is available.
- 4.3 The chainsaw should be of a size appropriate to the material being cut. Top handled chainsaws are only suitable for use off the ground.
- 4.4 Chainsaws should be started and used according to manufacturers' recommendations. Operatives must wear appropriate personal protective equipment.
- 4.5 The chain brake should be applied before starting and between cuts. The engine should be switched off when changing work position or if the saw is not in use for more than 30 seconds.
- 4.6 When using a chainsaw from a rope and harness secure work positions must be established and the use of secondary anchor points is recommended where the risk assessment dictates. Cut protected strops should be used where the cut is being made close to the anchor point, for example during section felling.

5. Personal Protective Equipment (PPE)

- 5.1 All persons on site must wear appropriate Personal Protective Equipment (PPE). The operator must inspect PPE before use. Damaged PPE must be discarded and replaced.
- 5.2 When using chainsaws, operators must wear PPE in accordance with national regulations and recommendations.
- 5.3 Operators not using chainsaws must wear safety boots and a safety helmet. Eye and hearing protection should also be worn when working in close proximity to operators using chainsaws or other machinery.

6. Organisation of the Work Site

- 6.1 All operatives should be aware of the work to be carried out and their personal responsibilities.
- 6.2 Suitable systems of communication between operatives must be established. Operators should check the danger zone before releasing any sections from the tree.
- 6.3 The work area must be identified and secured by the use of suitable signs and barriers or other appropriate means.
- 6.4 Safe working distances and practice with respect to overhead power lines must be maintained in accordance with the requirements of power suppliers and national regulations.
- 6.5 Work on, or close to public highways and railways must comply with national and local requirements regarding signing and the use of high visibility warning clothing.
- 6.6 Ground staff should inform aerial operators before entering the drop zone under the tree or operating noisy machinery such as chainsaws and brushwood chippers which could hinder communication.
- 6.7 Provision must be made for accidents and emergencies. All staff must be trained in emergency procedures including assisting with aerial rescue situations. This applies to tree care operations being undertaken from a rope and harness and from a lift platform.
- 6.8 Work in adverse weather or poor light conditions should only continue if safe practice can be maintained.

For further advice and information please contact your national EAC representative or visit the EAC website on: www.EAC-arboriculture.com.

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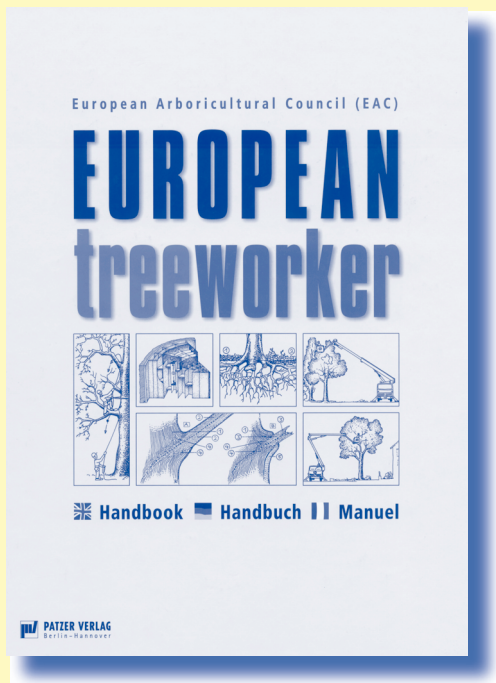
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