

Safety Guide 1: *Tree Climbing and Aerial Rescue*

1.0 Introduction

- 1.1 This leaflet provides an overview of safety guidance for anyone who is required to carry out tree climbing operations. The guidance is summarised from the Technical Guide on the subject (TG1): *Tree Climbing and Aerial Rescue*.

It contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

It is assumed that if you are applying the principles and guidance laid out here, then the decision that it is necessary to climb the tree has already been made.

For guidance on making that decision, reference should be made to the *Industry Code of Practice for Arboriculture: Tree Work at Height* (ICoP). Climbing should only be undertaken when it is not reasonably practicable to do the work from ground level or from a platform, in that order.

- 1.2 Everyone involved in tree climbing operations can use this leaflet as outline safety guidance to check that operators are following industry guidance.

- 1.3 This leaflet is not a substitute for adequate training.
- 1.4 This leaflet is not a substitute for the full Technical Guide.
- 1.5 In accordance with the ICoP, the key principles of tree work at height must be adopted when using this leaflet.

It is essential that:

- all work at height is properly planned, organised, supervised and managed;
- lifting (and lowering) systems are properly designed, including the compatibility and correct configuration of components within each system;
- any equipment used is suitable for the task and subject to periodic inspection and examination;
- maintenance of equipment is carried out to ensure all equipment remains safe for use; *and*
- everyone engaged in a tree climbing operation has the appropriate training and experience to be proficient in tasks they are required to undertake.

- 1.6 For further guidance you should consult Technical Guide 1: *Tree Climbing and Aerial Rescue* and undertake appropriate training.

2.0 Planning and Management

Ref.	Checklist	Yes	No	N/A
2.a	Is tree climbing the most appropriate method for carrying out the work?			
2.b	Has a suitable and sufficient recorded site-specific risk assessment been carried out?			
2.c	Do operators understand the risk assessment?			
2.d	Is there an opportunity for everyone on site to contribute to the site-specific risk assessment on the day of works?			
2.e	Are operators fully aware of the hazards and risks they are exposed to during the specific tree work at height task?			
2.f	Do operators know the control measures they must implement to ensure safe working and in turn create the safe system of work for carrying out the tree work?			
2.g	Have the control measures specified been carried out?			
2.h	Does the risk assessment process include dealing with emergencies?			
2.i	Are enough personnel present, including provision for rescue?			
2.j	Is the weather suitable for the tasks to be carried out?			
2.k	Has enough time been allocated to allow the work to be carried out safely and without applying undue pressure on the operational team?			

3.0 Roles and Responsibilities

Ref.	Checklist	Yes	No	N/A
3.a	Do all operators understand their roles and responsibilities?			
3.b	Are operators proficient to carry out their assigned duties?			
3.c	Is there appropriate supervision in place to manage the tree work at height operation?			
3.d	Does everyone on site understand the communication method between climbers and ground staff? Is it clear, unambiguous and agreed by all?			

4.0 On-site Preparation

Ref.	Checklist	Yes	No	N/A
4.a	Have hazards and risks identified by the site-specific risk assessment process been adequately addressed?			
4.b	Has a tree condition assessment been carried out?			
4.c	Have clearly defined drop and working zones been established?			
4.d	Do all operators understand the limits of each zone?			
4.e	Are there established procedures in place (1) for when someone wants to enter a drop zone; (2) for materials to be dropped into a drop zone; and (3) when handling equipment above the drop zone?			
4.f	Is the extent of the work zone clear with adequate demarcation in place to prevent unauthorised access?			
4.g	Is PPE correctly worn and used by every operator in either zone?			

5.0 Occupational Health

Ref.	Checklist	Yes	No	N/A
5.a	Can everyone on site maintain 'situational awareness'? Are they fit and well, physically and mentally?			
5.b	Is everyone on site aware of any individual operator's limitations?			
5.c	Does anyone on site require increased protection from, or reduced exposure duration to, a particular hazard which may affect their health? If so, has this been implemented?			
5.d	Do the techniques selected for use minimise the risk of muscular-skeletal disorders and fatigue? Has equipment been chosen to meet the operator's ergonomic requirements?			

6.0 Personal Fall Protection Systems in Tree Work

Ref.	Checklist	Yes	No	N/A
6.a	Has the climber elected to use a system that allows them to ascend, move around the tree and descend appropriately?			
6.b	Does the system correctly comprise a primary system and backup, and does the backup provide protection against failure of the primary system, including main line, components and anchor?			
6.c	Are the correct connection points to the harness being used, appropriate to the operation?			
6.d	Have all the working considerations for using a personal fall protection system been taken into account by the climber?			

7.0 A Strategy for Access

Ref.	Checklist	Yes	No	N/A
7.a	Do the methods selected take into account: the tree condition assessment, climbers' abilities, training, surrounding features and tree structure?			
7.b	Have all aspects of the chosen access method and ascent technique been discussed and agreed as a safe method of working by the team?			
7.c	Is the work team familiar with the techniques to be used to allow an effective rescue to take place?			

8.0 Selecting an Ascent Technique

Ref.	Checklist	Yes	No	N/A
8.a	Does the system correctly comprise primary and backup systems?			
8.b	Does the climber have the appropriate knowledge to safely ascend and descend on their chosen system?			
8.c	When an ascent technique is used, are the distance and consequences of a fall minimised?			
8.d	Does the climber use correct rope advance procedures during changeovers?			
8.e	Is the climber correctly anchored to the tree at all times?			
8.f	Are newly established anchors subjected to a full-body-weight test where practical?			
8.g	If spikes are used, is it possible to descend without solely having to spike back down the stem?			

9.0 Managing Slack and Improving Climber Positioning

Ref.	Checklist	Yes	No	N/A
9.a	Does the climber always remain anchored to the tree structure?			
9.b	Does the climber ensure that the fall protection system does not allow a potential fall distance to exceed 500mm?			
9.c	Are two high anchors used wherever practical?			
9.d	Has the climber included an adjustable lanyard as part of their system?			
9.e	Does the climber use their fall protection system appropriately to reduce the risk of pendulum swing?			

10.0 Descent

Ref.	Checklist	Yes	No	N/A
10.a	Does the climber’s primary system allow for an uninterrupted descent to the ground?			
10.b	Does the climber check the length of rope before descent?			
10.c	Are the climber’s systems appropriately terminated?			
10.d	Is descent carried out in a controlled manner that minimises risk to the climber and potential equipment damage?			
10.e	Are anchor devices lowered in a controlled manner?			

11.0 Anchors and Anchor Point Selection

Ref.	Checklist	Yes	No	N/A
11.a	Have operators been trained in anchor point selection?			
11.b	Can the selected anchor support any foreseeable loading?			
11.c	Have anchors been fully load-tested prior to ascent?			
11.d	Have load-bearing anchors within the tree been subjected to full-body-weight tests?			
11.e	Are climbers using equipment to create anchors in accordance with the manufacturer’s guidance and is it suitable for its intended application?			

12.0 Equipment: General

Ref.	Checklist	Yes	No	N/A
12.a	Is the equipment provided suited to the task?			
12.b	Does everyone on site have the correct PPE and is it in good condition?			

13.0 Equipment Components: Building a System

Ref.	Checklist	Yes	No	N/A
13.a	Does the selected climbing equipment meet the relevant conformity standard?			
13.b	Are all parts of the climber’s system correctly configured, in accordance with manufacturer’s guidance?			
13.c	Are neighbouring components of the system compatible with each other?			
13.d	Are the standard(s) against which the equipment has been tested identifiable?			

14.0 Equipment for Tree Access and Rescue

Ref.	Checklist	Yes	No	N/A
14.a	Are the components of the fall protection system being used correctly in accordance with manufacturer’s guidance?			
14.b	Do the components selected meet technical guidance requirements?			

15.0 Equipment: Inspection, Care, Storage and Maintenance

Ref.	Checklist	Yes	No	N/A
15.a	Have operators received training in climbing equipment inspection, maintenance and record-keeping?			
15.b	Do specific users of equipment understand manufacturer’s recommendations for product lifespan, maintenance and storage?			
15.c	Are adequate records maintained of equipment issue, inspection, withdrawal and disposal?			
15.d	Are visual and tactile pre-use checks carried out to a proficient standard?			

16.0 Aerial Rescue

Ref.	Checklist	Yes	No	N/A
16.a	Has an adequate rescue plan been prepared for aerial rescue?			
16.b	Are suitable and sufficient resources to make an effective rescue immediately available?			
16.c	Has the nominated rescuer(s) received training in rescue techniques and the equipment to be used?			
16.d	Does everyone understand their role and responsibility in the event of an aerial rescue?			
16.e	Have the nominated rescuer and the operatives involved practised rescue techniques at regular intervals to maintain skills?			
16.f	Can the casualty be removed from the tree safely without risk of injury to the rescuer?			

Notes

Date of observations:			
Location:			
Observer's name:		Signature:	
Who is being observed?			
Comments:			
Actions:			
Reference:			
Actions completed date:			
Confirmed by:		Signature:	

Further information

This safety guide is one of a series produced by the **Arboricultural Association (AA)**. There is also a wide range of additional safety and technical information in relation to arboriculture on the AA website: www.trees.org.uk
 For safety information in relation to forestry visit the **Forest Industry Safety Accord (FISA)** website: www.ukfisa.com
 For more general information about health and safety related to tree work, visit the **Health and Safety Executive** website: www.hse.gov.uk/treework/index.htm

Further reading

Industry Code of Practice for Arboriculture – Tree work at height (second edition, May 2020)
 Technical Guide 1: *Tree Climbing and Aerial Rescue*
 Technical Guide 2: *Use of Tools in the Tree*
 Technical Guide 3: *Rigging and Dismantling*
 Technical Guide 4: *Use of Mobile Cranes in Tree Work*
 Technical Guide 5: *Use of Mobile Elevating Work Platforms in Tree Work*
 FISA 802: *Emergency Planning*
 FISA 805: *Training and Certification*