

09 CLIMBING TECHNIQUES



Use of this worksheet

This worksheet is part of a series of interactive worksheets that has been produced in association with Husqvarna to support the delivery of training for the City & Guilds (NPTC) suite of chainsaw qualifications.

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Content

This worksheet covers the following outcomes:

Be able to work safely

Be able to access a tree using a rope and harness

Know relevant health and safety legislation and industry good practice



Know how to access a tree using a rope and harness

**Inspection of equipment to ensure that it is safe,
fit to use under manufacturer's instructions and
relevant legislation**

The majority of health and safety will have already been covered in worksheet **02 Health and Safety in Aerial Forestry and Arboricultural Operations** and should have been completed before moving onto this worksheet.

Just prior to use, all the equipment that is going to be used or might be needed should be checked.

Examine the pictures in the table below and overleaf and describe what needs to be checked.

| Picture | Checks that need to be made |
|---|-----------------------------|
|  | |
|  | |

| Picture | Checks that need to be made |
|---|-----------------------------|
|  | |

How to ensure that access equipment and systems are in good working order

To ensure that access equipment and systems are safe to use the following must happen **(fill in the missing words)** :

- ___ - ___ checks must be undertaken before using equipment and systems
- ongoing equipment and systems checks must be made during ___ .
- ___ monthly inspections must take place as required under LOLER

How to use and maintain tools, equipment and PPE (excluding the chainsaw and maintenance tools)

The maintenance of tools equipment and PPE may include:

- **inspection**
- **cleaning; and**
- **repair.**

Describe the maintenance and state the use of the tools and equipment in the pictures overleaf.


| Picture | Maintenance and use |
|---|---------------------|
|  | |
|  | |
|  | |
|  | |


Different methods that can be used to access a tree safely and when they might be used


There are a number of different ways that can be used to access a tree safely; they include using:

- a mobile elevated working platform (MEWP)
- a secured ladder
- a rope and harness and different techniques; for example, the body thrust, foot lock and single rope technique
- a harness, climbing spikes and a steel-cored flip line.

For each of the methods illustrated in the pictures below and overleaf, describe how they can be used safely and when they should be used.

| Picture | How and when a mobile elevated working platform can be used safely |
|--|--|
|   | |

| Picture | How and when a secured ladder can be used safely |
|---|--|
|  <p>Acknowledgement - The Arboricultural Association Good Climbing Guide</p> | |

| Picture | How and when a rope and harness can be used safely 1. The Body Thrust |
|---|--|
|  <p>Acknowledgement - The Arboricultural Association Good Climbing Guide</p> | |

Picture

How and when a rope and harness can be used safely
2. Foot Lock






(a) With a Prusik Knot



(b) With a mechanical ascender

**Acknowledgement - The Arboricultural Association
Good Climbing Guide**

| Picture | How and when a rope and harness can be used safely 3. Single Rope |
|---|--|
|  <p>Acknowledgement - The Arboricultural Association Good Climbing Guide</p> | |

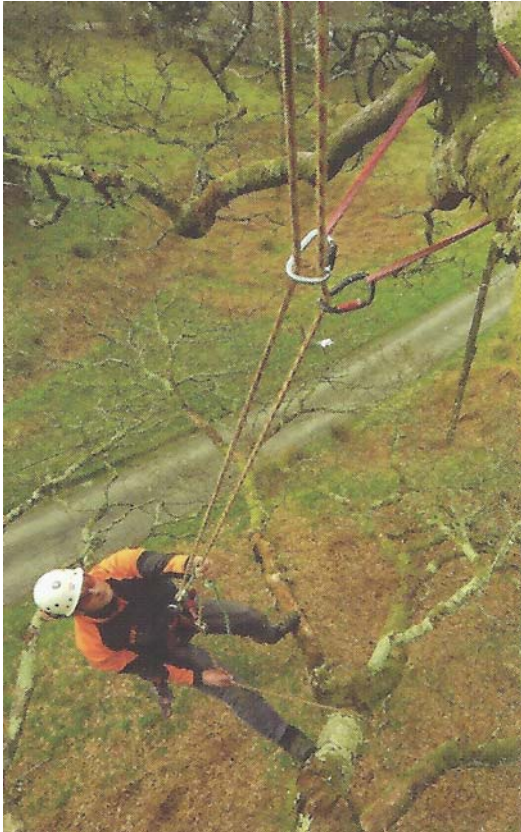
| Picture | How and when a harness, climbing spikes and a steel-cored flip line can be used safely |
|---|--|
|   <p>Acknowledgement - The Arboricultural Association Good Climbing Guide</p> | <p>(a) A soft link and adjuster</p> <p>(b) Crossed flip line on a thinner tree</p> |


Different positioning techniques that can be used within the crown of a tree and when each should be used


There are a number of different positioning techniques that can be used within the crown of a tree. It is important to know when it is appropriate to use each different technique. These include:


- re-directs using webbing or a rope sling and karabiners
- supplementary anchor points
- branch walking and triangulation from two climbing lines.

For each of the techniques illustrated in the pictures below and overleaf, describe how they can be used safely, and when each should be used.

| Picture | How and when re-directs can be used safely |
|---|--|
|  <p>Acknowledgement - The Arboricultural Association Good Climbing Guide</p> | |

| Picture | How and when supplementary anchor points can be used safely |
|--|---|
|  <p>Acknowledgement - The Arboricultural Association Good Climbing Guide</p> | |

| Picture | How and when branch-walking and triangulation can be used safely |
|---|---|
|  <p>Acknowledgement - The Arboricultural Association Good Climbing Guide</p> | <p>(a) Branch walking with lanyard</p> |

| Picture | How and when branch-walking and triangulation can be used safely |
|---|---|
|  <p>Acknowledgement - The Arboricultural Association Good Climbing Guide</p> | <p>(b) Triangulation</p> |

Notes

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